ADMINISTRATION REPORT

OF THE

INDIAN STORES DEPARTMENT

FOR THE YEAR

1937-38

PUBLISHED BY THE MANAGER OF PUBLICATIONS, DELHI.
PRINTED BY THE MANAGER, GOVERNMENT OF INDIA PRESS, SIMLA
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Price: Rs. 2-4-0 or 3s. 9d.

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A portion of the Ponnai Bridge on the Madras-Bangalore Road.
(*Vide* Paragraph 46).

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ADMINISTRATION REPORT OF THE INDIAN STORES DEPARTMENT FOR THE YEAR 1937-38.

CHAPTER I.

SUMMARY.

General.—The record of the activities of the Indian Stores Department for the year 1937-38 shows a further marked advance over the corresponding figures for the preceding year. The turnover of every branch of the Department exceeded the highest previous record, which result is the more gratifying as it has been achieved in the first year of the Constitutional Reforms in India. It is noteworthy that the purchases on behalf of the Autonomous Provinces amounted to Rs. 82,09,244, exceeding the corresponding figure for 1936-37 by Rs. 11,67,884, in spite of the fact that purchases for authorities in Burma have been accounted for separately from the 1st April 1937.

2. *Activities of the Purchase Branch of the Department.*—The number of orders placed during the year increased from 80,318 to 86,148 and their value from Rs. 6,49,06,534 to Rs. 7,89,31,378 showing an increase of Rs. 1,40,24,844 (or 21·6%). Full details of the work of the Purchase Branch will be found in Chapter III and Appendices V to XI and XXI.

3. *Activities of the Inspection Branch.*—The value of stores inspected during the year increased from Rs. 5,98,18,856 to Rs. 7,48,32,187. The value of stores inspected against orders placed by the Indian Stores Department increased from Rs. 4,80,84,200 to Rs. 6,12,63,700 and the value of stores inspected by the Department on behalf of other purchasing authorities increased from Rs. 1,17,34,656 to Rs. 1,35,68,487. The tonnage of stores charged on weight increased from 3,36,375 to 4,35,609. The number of tests and analyses carried out at the laboratories of the Government Test House, Alipore, and the Metallurgical Inspectorate, Jamshedpur, amounted to 22,902 as compared with 18,228 during the preceding year.

Full details of the work of the Inspection Branch will be found in Chapters IV, V, VI and in Appendices XII to XIX and XXI.

4. *The operation of the Rupee Tender Rules.*—The revised rules for the supply of articles required to be purchased for the public service, which make it obligatory on all purchasing departments to obtain their requirements of stores (with certain exceptions) on the condition that they are delivered and paid for in rupees in India, were in force in all Central Departments and Governor's Provinces, except the Punjab. The Punjab Government still have the revision of their Stores Rules under consideration.

5. *Changes in the procedure consequent on the introduction of the Government of India Act, 1935.*—Up to the end of the financial year 1936-37 all contracts arranged by the Department were executed in the name of the Secretary of State for India in Council. On the introduction of the Government of India

Act, 1935, an important alteration was made in this procedure. Under the revised arrangements, introduced with effect from the 1st April 1937, contracts on behalf of authorities under the Central Government (including local bodies under their control) are executed in the name of the Governor General in Council. Purchases on behalf of the Crown Representative's Department are made in the name of the Crown Representative who has delegated the necessary authority.

As regards the purchases arranged on behalf of Governor's provinces (including local bodies under the control of Provincial Governments) and Indian States, it was decided that under the present constitution the contracts should be executed in the name of the Governor of the Province or the Ruler of the State concerned. It consequently became necessary to obtain formal delegation of authority from the Provincial Governments and States concerned to enable officers of the Purchase Branch to enter into contracts on their behalf.

All the Provincial Governments in India, except the Government of the North-West Frontier Province, have issued the necessary authority and orders for stores required by them are being placed in the name of the Governor of the Province concerned. The Government of the North-West Frontier Province have the matter under their consideration. Some of the Provincial Governments have also agreed to orders being placed in their name for local bodies in their provinces.

Certain Indian States have similarly delegated general authority to Purchase Officers of the Department to enter into contracts on their behalf. Specific certificates conferring such authority are obtained with indents received from other States and orders are in every case executed in the name of the State concerned.

It has been decided that, till the advent of the Federal Railway Authority, purchases on behalf of Railways worked by companies should be effected in the name of the Governor General in Council. The Railway companies concerned have signed the necessary indemnity bonds to protect the Governor General in Council in respect of transactions effected on their behalf.

The Governments of Burma, Ceylon, Straits Settlements and Aden have delegated similar authority to the Purchase Officers of the Department and purchases on their behalf are being effected in the name of the respective Governments.

6. *Indents on the Director General, India Store Department, London, and firms abroad.*—Copies of 2,326 indents of the estimated value of Rs. 1,27,21,027 placed by the various Provincial Governments and Departments of the Central Government on the Director General, India Store Department, London, or direct on firms abroad, were received for scrutiny during the year as against 1,623 indents of the estimated value of Rs. 99,62,717 examined during the year 1936-37.

Demands of the estimated value of Rs. 51,133 were challenged during the year as against Rs. 9,493 during the preceding year. The following statement shows the result of the examination of indents during the years 1934-35 to 1937-38 :—

Year.	No. of indents examined.	Value of indents examined.	Value of items challenged.	Percentage of value of items challenged to total value of indents.
		Rs.	Rs.	
1934-35	1,257	93,32,272	74,640	0·79
1935-36	1,416	77,42,267	33,293	0·43
1936-37	1,623	99,62,717	9,493	0·001
1937-38	2,326	1,27,21,027	51,133	0·401

The increase in the number of indents from 1,623 in 1936-37 to 2,326 during the year under review, was mainly due to the increased demands for aviation stores.

The half yearly lists of stores obtained from abroad were published in the Indian Trade Journal during September 1937 and March 1938 for the information of the commercial and industrial community.

In addition to the scrutiny of indents placed by Government Departments, by arrangement with the Railway Department the examination of indents placed by Railways worked by Companies was started during the year. Such items of stores included in the indents as could be obtained of Indian manufacture were brought to the notice of the Railway Board with a veiw to ensure that Indian manufacturers were given opportunities to tender for future demands.

7. *Utilisation of the services of the Indian Stores Department by authorities outside India.*—The services of the Department continued to be utilised, as in the past years, by the Resident Engineer, Royal Airship Base, Karachi, for the purchase and inspection of diesel and lubricating oils and by the Inspector General of Police, Singapore, Straits Settlements, for badges, blankets, lungies and accoutrements. The total value of orders placed on behalf of these two authorities aggregated Rs. 7,420. The Colonial Store Keeper, Ceylon, purchased fuel oil through the Department of the value of Rs. 3,524. Tents and durries of the value of Rs. 2,760 were inspected on behalf of the Palestine Government and cast iron pipes and specials aggregating 89 tons were inspected on behalf of the Singapore Municipality.

The transactions on behalf of the Governments of Burma and Aden have been shown in the statistics for the year under review under the British and

Colonial Governments, as a result of the introduction of the Government of India Act, 1935. The value of stores purchased on their behalf amounted to Rs. 2,70,608 and Rs. 3,129 respectively. Stores amounting to Rs. 59,358 and three tons of castings were also inspected on behalf of the Burma Railways.

8. *Financial position.*—The financial result of the working of the Department for the year is exhibited in the statement of income and expenditure prepared by the Audit Officer, Indian Stores Department, which appears as Appendix XX. The statement shows, separately, the expenditure on the commercial and non-commercial activities of the Department.

The cost of the operations of the Department connected with the purchase and inspection of stores, and the fees earned on these operations, are shown in the commercial section of the account. The net result of the year's working under this section shows a deficit of Rs. 2,59,355 only as against Rs. 6,00,290 during the year 1936-37.

The expenditure on the non-commercial section of the account amounted to Rs. 5,56,986 as against Rs. 5,37,672 during the year 1936-37, showing an increase of Rs. 19,314. The recoveries creditable to this section amounted to Rs. 2,12,928 against Rs. 2,18,275 during the preceding year. The net expenditure of the year, which represents the contribution of the Department towards the encouragement of Indian industries, amounted to Rs. 3,44,058 against Rs. 3,19,397 during the year 1936-37. In addition to this sum, an expenditure of Rs. 1,79,887 was incurred for the same object from the funds of the Industrial Research Bureau, which is attached to the Indian Stores Department. A separate report dealing with the activities of the Bureau during the year has been issued.

9. *Organisation of the Indian Stores Department and procedure in force.*—A brief description of the organisation of the Department, with hints for the guidance of indenting authorities, will be found in Appendix I to this Report. Full details are given in a pamphlet entitled "Indian Stores Department—Its Organisation and Functions" copies of which can be obtained by indenting authorities, free of charge, on application to the Chief Controller of Stores.

CHAPTER II.

ORGANISATION.

10. *Changes in the organisation.*—In order to assist the Superintendent, Government Test House, Alipore, Calcutta, in the disposal of administrative and non-technical work of the Test House, a post of Personal Assistant to the Superintendent was created with effect from the 1st April 1937. The designation of the Personal Assistant to the Controller of Inspection, Calcutta Circle, who had been entrusted with similar duties in respect of the Calcutta Purchase Circle, was altered to " Assistant Controller of Administration, Calcutta Purchase and Inspection Circles".

A few additions were also made to the subordinate technical, ministerial and inferior staff.

The Industrial Research Bureau, which was established in the year 1934-35 as an experimental measure, was placed on a permanent footing with effect from the 1st March 1938.

11. *Organisation at the end of the year.*—The following table shows the number of sanctioned posts in the Department under the different classifications at the end of the year under review.

	Indian Stores Department.	Industrial Research Bureau.	Total.
Gazetted officers	67	4	71
Technical subordinates including Drawing Office staff ..	107	25	132
Ministerial staff	394	22	416
Inferior servants	227	21	248
Total	795	72	867

The additions to the staff of the Stores Department proper comprised :—

Technical subordinates	3
Ministerial Staff	12
Inferior servants	18
	33

A conspectus of the organisation on the 31st March 1938 will be found in Appendix II.

12. *Important changes in personnel.*—Mr. E. A. Wraight, Metallurgical Inspector, to replace whom Mr. R. A. MacGregor was recruited in February 1937, retired from the service with effect from the 27th June 1937. Mr. P. J. Gahan, Controller of Purchase, Calcutta Circle, proceeded on leave, preparatory to retirement, with effect from the 15th July 1937, and Rai Bahadur J. P. Ganguli, Deputy Director of Administration and Intelligence, retired with effect from the 20th June 1937.

One Indian officer was recruited through the Federal Public Service Commission to fill the post of Assistant Research Officer, at the Government Test House, and three Indian subordinates were promoted to gazetted rank during the year.

13. *Numbers of Europeans and Indians in the Department.*—A graph will be found in Appendix III showing the progress of Indianisation and the proportion of Indians and non-Indians in the gazetted ranks from year to year, since the constitution of the Department in 1922. The numbers of European and Indian officers on the 31st March 1938 stood at 18 and 52 respectively as against 21 and 50 on the same date in the previous year. The position on the 1st January 1938 was 18 Europeans and 50 Indians.

14. *Facilities for technical training.*—An Examiner of Stores was granted facilities for visiting certain engineering firms in the United Kingdom during his leave.

15. *Recruitment in the subordinate technical staff.*—As in previous years all vacancies were filled by Indians.

16. *Communal composition of the staff.*—The orders of the Government of India regarding the adequate representation of the various communities in the staff of the Department were strictly observed and the communal composition of the staff on the 1st January 1938, as compared with the corresponding date of the previous year, is shown in Appendix IV.

CHAPTER III.

WORK OF THE PURCHASE BRANCH.

17. *General.*—The total value of the purchases made by the Department in the year under review amounted to Rs. 7,89,31,378 against Rs. 6,49,06,534 in the previous year, an increase of Rs. 1,40,24,844 or 21·6 %. This satisfactory expansion in the business of the Department constituted a record turnover.

The volume of purchase work also greatly increased, a larger number of indents and orders being dealt with, as shown by the following statement :—

Year.	No of indents received.	No of orders placed.
1937-38	78,425	86,148
1936-37	71,317	80,318
1935-36	67,144	75,361

An analysis is given below of the distribution of the work throughout the various purchase organisations of the Department :—

Organisation.	No. of indents received.			No. of orders placed.		
	1935-36.	1936-37.	1937-38.	1935-36.	1936-37.	1937-38.
Provincial.						
Calcutta Purchase Circle.	11,216	9,059	11,033	14,322	12,738	13,616
Bombay Purchase Circle.	4,130	2,967	3,701	5,797	5,488	5,869
Karachi Purchase Circle.	4,540	3,563	4,635	7,738	6,848	7,759
Total Provincial Circles	19,886	15,589	19,369	27,857	25,074	27,244
Total Headquarters ..	47,258	55,728	59,056	47,504	55,244	58,904
Grand Total	67,144	71,317	78,425	75,361	80,318	86,148

Details of the values of orders placed are given in Appendices V to VIII.

18. *Clientèle of the Department.*—During the year 1937-38 there were still further additions to the list of indentors utilising the services of the Department and the Department's clientèle continues to expand.

19. *Variations in demands.*—The following statement shows the fluctuations in the values of orders placed on behalf of various indenting authorities as compared with the corresponding figures of the preceding year :—

Indenting authorities.	Value of orders during		Increase + Decrease —	Percentage Increase + Decrease —
	1936-37	1937-38.		
	Rs.	Rs.	Rs.	
Central, Defence	1,19,51,371	1,88,98,218	+69,46,847	+58·1
Central, Civil	67,18,330	71,84,310	+4,65,980	+6·94
Railways, State managed ..	3,30,46,908	3,89,14,155	+58,67,247	+17·75
Railways, Company managed ..	28,33,452	7,71,416	—20,62,036	—72·42
Railways managed by Indian States	2,82,160	11,64,251	+8,82,091	+312·62
Total Railways ..	3,61,62,520	4,08,49,822	+46,87,302	+12·96
Provincial Governments	70,41,360	82,09,244	+11,67,884	+16·59
Indian States	5,70,855	5,79,816	+8,961	+1·56
Quasi-public bodies ..	24,51,625	29,25,287	+4,73,662	+19·3
British and Colonial Governments ..	10,473	2,84,681	+2,74,208	+2618·2
Grand Total ..	6,49,06,534	7,89,31,378	+1,40,24,844	+21·6

Owing to the separation of Burma from India on the 1st of April 1937, the value of purchases made during the year on behalf of the Burma Government, Burma Railways and the Army authorities in Burma, has been shown in this Report under " British and Colonial Governments ".

20. *Purchases on behalf of the Defence Department.*—The value of stores purchased for the Army, Royal Air Force and other Defence authorities amounted to Rs. 1,88,98,218, an increase of Rs. 69,46,847 or 58·1% over the previous year's figure of Rs. 1,19,51,371.

The value of textiles purchased increased from Rs. 68,60,189 to Rs. 1,12,55,389 and the value of Engineering Stores purchased increased from Rs. 50,91,182 to Rs. 76,42,829.

21. *Purchases on behalf of Civil Departments of the Central Government.*—Stores purchased for Civil Departments of the Central Government increased in value from Rs. 67,18,330 to Rs. 71,84,310. Larger purchases were made for the Posts and Telegraphs Department, and the Civil Aviation Department, but the purchases made for the Central Public Works Department decreased.

22. *Purchases on account of Railway administrations.*—Stores purchased for State Railways during the year amounted to Rs. 3,89,14,155 against Rs. 3,30,46,908 in the previous year, an increase of Rs. 58,67,247 or 17·75%. Purchases for Company managed railways declined from Rs. 28,33,452 to Rs. 7,71,416 and those for Railways managed by Indian States increased from Rs. 2,82,160 to Rs. 11,64,251. The total purchases for all Railways amounted to Rs. 4,08,49,822, against Rs. 3,61,62,520 in 1936-37, an increase of 12·96%.

In paragraph 20 of the Administration Report for 1935-36 it was mentioned that as a result of the meetings with the Railway Board eighteen items were added to the list of the requirements of State Railway Administrations, the purchase and inspection of which were entrusted to the Indian Stores Department.

The list has been further expanded by the addition of the following classes of stores :—

(1) Blocks, pulley.

(2) Electrical heating appliances, electrical fittings for external lighting including flood lights and flood light fittings.

(3) Electrical measuring instruments and meters with accessories.

(4) Fans and blowers, foundry and forge.

(5) Furnaces and forges.

(6) Gauges, pressure (steam, air and water).

(7) Hydrants, locomative.

(8) Lead seals.

(9) Machines, riveting, hydraulic.

(10) Machines, rock drilling.

(11) Machines, stone breaking.

(12) Mills, mortar.

(13) Mills, pug.

(14) Mills, soorkee.

(15) Plant, disinfecting.

(16) Plants, chlorinating and water treatment other than plant forming part of large water softening and filtration schemes.

(17) Presses, hydraulic (forging, wheel, etc.).

(18) Pumps, boiler testing.

(19) Road rollers.

(20) Sand blasting apparatus.

(21) Sanitary ware and fittings.

(22) Shafting, pulleys and shafting fittings.

(23) Soda ash.

(24) Soda, caustic and washing.

(25) Stoves and cooking ranges other than stoves and ranges required for rolling stock.

(26) Twine and sutlee.

(27) Webbing.

(28) Wood working machinery.

23. *Purchases on behalf of Provincial Governments.*—The total of these purchases amounted to Rs. 82,09,244 against Rs. 70,41,360 an increase of Rs. 11,67,884 or 16·59%.

Larger purchases were made for the Governments of Bombay, United Provinces, Punjab, Assam and North-West Frontier Province, but the value of purchases on behalf of Madras, Bengal, Bihar and Central Provinces were less than during the previous year.

24. *Effect of price levels on the turnover of the Department.*—The following list shows fluctuations in the prices of certain classes of stores purchased by the Department.

Name of article.	Average percentage decrease in prices as compared with 1936-37.
Textiles.	
Drill, bleached	16·7
Great-coat cloth	13·2
Flannel, silver grey	6·3
Sheets, barrack	6·1
Drill, blue, medium	5·3
Drill, khaki	3·9
Engineering and Miscellaneous Stores.	
Electrodes	14·0
Paint, black, readymixed	10·8
Enamel, white	9·3
Oil, linseed, double boiled	9·1
Oil, medium, axle	8·9
Oil, Castor	7·7
Oil, Cylinder, ordinary	6·6
Cooking ranges "Fortress" or "Chowringhee"	5·5
Paint, black, stiff	5·5
Bituminous solution, black	4·9
Glasses, looking	3·5
Oil, gas making	2·7
Tubes, rubber, bicycle	2·3
Oil, kerosene	1·6
Oil, linseed, raw	1·5

Name of article	Average percentage increase in prices as compared with 1936-37.
Textiles.	
Socks	52·0
Paulins, flax	27·3
Canvas, flax	21·1
Jerseys	15·0
Durries	12·5
Postal bags, jute, canvas	3·0
Serge, service dress	2·0
Engineering and Miscellaneous Stores.	
Boiler and flue tubes	92·0
Spring steel	77·9
Wire, M. S.	65·0
Flats and rounds	32·7
Pig iron	30·0
Angles	27·6
Rings, rolling	27·1
Plates, mild steel	22·9
Wires, copper, bare	20·0
Beaters, gangmen's	19·6
Tyres, steel	19·6
Cables, flameproof and loco headlight	18·0
Piston rods, brass covered vacuum brake	16·7
Wheels and axles	16·2
Hose pipe	16·1
Cooking ranges " Africander "	14·5
Poles, steel, tubular	14·0
Axles, straight	13·8
Cables, V. I. R. and insulated	13·0
Cylinder, vacuum brake	8·8
Tar, crude	8·2
Insulators, porcelain	8·0
Asbestos cement	7·4
Tool steel	7·1
Tallow	6·9
Paint, white lead	6·5
Turpentine	5·5
Creosote	5·5
Charpoys, tubular	4·8
Bitumen emulsions	4·2
Oil, cylinder, superheat	3·8
Varnish body, hard drying	3·7

Name of article.	Average percentage increase in prices as compared with 1936-37
Engineering and Miscellaneous Stores—contd.	
Rings, gland packing, India rubber	3·4
Road tars.	3·2
Red lead, dry	3·0
Cells, electric, primary, inert, and dry	3·0
Varnish, gold size	2·6
Fireclay	0·6
Oil, diesel	0·2

25. *Purchase of Textiles and Leather goods.*—During the year the total value of purchases of textile and leather goods amounted to Rs. 1,58,13,144 against the previous year's total of Rs. 1,15,12,129. Thus there was an increase of Rs. 43,01,015 or 37·36%. The purchases comprised :—

Items.	1936-37.	1937-38.
	Rs.	Rs.
Cotton goods	54,37,842	70,35,413
Woollen goods	45,97,013	75,49,171
Jute, flax, etc.	12,44,468	10,30,592
Leather goods	2,32,806	1,97,968
Total ..	1,15,12,129	1,58,13,144

The purchases on behalf of the Defence Department increased from Rs. 68,60,189 in 1936-37 to Rs. 1,12,55,389. Purchases for Provincial Governments declined from Rs. 12,54,354 to Rs. 10,40,088 and for Railway administrations from Rs. 25,31,340 to Rs. 23,46,963. Of the total purchases of textiles, allied stores and leather goods amounting to Rs. 1,58,13,144, articles of indigenous manufacture amounted to Rs. 1,51,37,899 and imported stores amounted to Rs. 6,75,245 only. The proportion of indigenous and imported stores thus stood at 95·73 and 4·27 during the year as compared with 92·6 and 7·4 in 1936-37.

Details of important purchases of articles of indigenous manufacture are given in paragraph 72.

26. *Details of important purchases of Textiles and Leather goods.*—The more important purchases made during the year were :—

	Rs.
Tents and tent components	18,22,000
Blankets	16,61,000
Drills	13,15,000
Flannel	12,66,000
Greatcoats and greatcoat cloth	10,11,000

	Rs.
Jerseys, waistcoats, vests, banians, etc.	9,80,000
Socks, stockings, gloves etc.	8,37,000
Cotton waste	6,33,000
Pugree cloth, dyed and bleached	5,53,000
Serges	5,34,000
Putties, cotton and woollen	4,65,000
Rugs, horse	2,95,000
Drawers, cotton and woollen	2,85,000
Garments, made-up	2,29,000
Dhoti cloth, long cloth and dosuti cloth	2,08,000
Duck, cotton	1,85,000
Durries	1,85,000
Canvas, cotton, hemp, flax, etc.	1,81,000
Paulins, flax, jute and hemp	1,61,000
Yarn, cotton and woollen	1,53,000
Leather cloth, linoleum, etc.	1,47,000
Ropes, head and heel, manilla, etc.	1,46,000
Cordages, cotton, etc.	1,39,000
Wool cotton, absorbent	1,33,000
Sheets, barrack and hospital	1,32,000
Cloth, cord	1,30,000
Carpets	1,23,000
Thread, sewing and twine	1,18,000
Tape and webbing	1,16,000
Twill, Cotton	95,000
Bags, postal	94,000
Bandage cloth	94,000
Flannelette	86,000
Gauze, absorbent	81,000
Covers and nets, tank, mule, etc.	78,000
Cloth, jaconet, dungree, etc.	72,000
Boots, shoes, etc.	70,000
Hides and skins and leather accoutrements	58,000
Nettings, mosquito	57,000
Hessians and gunnies	55,000
Towels and towelling cloth	53,000
Kanats for aerodrome hangars	51,000

27. *Purchases of Engineering, Hardware and Miscellaneous Stores.*—The total purchases during the year amounted to Rs. 6,31,18,234 against the previous year's figure of Rs. 5,33,94,405, an increase of Rs. 97,23,829 or approximately 18%.

The following table shows the extent to which Engineering and Miscellaneous stores were purchased on behalf of the various authorities utilising the services of the Department.

Indenting authorities.	1936-37.	1937-38.	Difference.
	Rs.	Rs.	Rs.
Central, Defence	50,91,182	76,42,829	+25,51,647
Central, Civil	58,83,257	62,11,596	+3,28,339
Railways, State managed	3,06,00,917	3,66,79,325	+60,78,408
Railways, Company managed	27,88,114	6,88,835	—20,99,279
Railways, managed by Indian States	2,42,149	11,34,699	+8,92,550
Provincial Governments	57,87,006	71,69,156	+13,82,150
Indian States	5,68,925	5,72,088	+3,163
Quasi-public bodies	24,26,858	29,09,258	+4,82,400
British and Colonial Governments	5,997	1,10,448	+1,04,451
Total ..	5,33,94,405	6,31,18,234	+97,23,829

The value of important items of Engineering and miscellaneous stores wholly or partially manufactured in India, for which contracts were placed during the year, amounted to Rs. 2,75,85,000, representing 43·7 per cent. of the total value of purchases during the year, as against 38% in the year 1936-37.

28. *Details of important purchases of Engineering and Miscellaneous Stores.*—The more important purchases of Engineering and Miscellaneous Stores made during the year were :—

	Rs.
Axles, tyres, wheels, screw coupling, underframe parts etc. for Railway wagons and locomotives	74,98,000
Mild steel sections and sheets	53,69,000
Railway permanent way material and fittings	41,27,000
Cables, conductors and transmission line material ..	28,20,000
Road dressing materials	26,88,000
Tools, including track tools, hand tools and workshop tools	24,75,000
Lubricating oils and greases	22,26,000
Paints, enamels and varnishes	21,21,000
Motor vehicles and spare parts	20,90,000

	Rs.
Cement	20,49,000
Steel structures, tanks and stagings	15,81,000
Oil, kerosene	14,88,000
Diesel rail cars	14,20,000
Cells, electric, primary, secondary and spare parts	11,60,000
Oil, fuel	10,25,000
Fans, electric	10,22,000
Pipes and specials, cast iron	10,16,000
Lamps, electric	10,08,000
Wagons and trucks	7,59,000
Wire, galvanised iron	7,31,000
Bolts and nuts	6,70,000
Dynamos and other train lighting equipment	6,52,000
Pig iron	6,37,000
Vacuum brake fittings	6,20,000
Generating sets, engines and spares	5,81,000
Pipes and fittings, mild steel and galvanised iron	5,15,000
Sheets, galvanised iron	4,94,000
Coal and coke	4,85,000
Tyres and tubes, rubber	4,79,000
Electrical fittings and miscellaneous electrical stores	4,11,000
Engineering plant, machinery and spare parts	4,10,000
Tubes, boiler, flue, etc.	4,07,000
Sheet piling, steel	3,92,000
Gas, oxygen, acetylene, etc.	3,66,000
Brodcasting equipment	3,65,000
Oil, castor	3,39,000
Signalling and interlocking materials	3,33,000
Lead	3,17,000
Charpoys, tubular	2,90,000
Aeroplane hangars	2,84,000
Pipes, Hume,	2,53,000
Acids, chemicals, etc.	2,50,000
Road rollers and road making equipment	2,36,000
Petrol	2,34,000
Steel, spring, tool	2,28,000
Bricks, fire and fireclay	2,28,000
Locomotives and spare parts	2,18,000
Pumping sets and spares	2,16,000
Pipes, asbestos	2,11,000
Wire ropes	2,02,000
Oil, linseed	1,96,000
Fittings, water supply	1,91,000

	Rs.
Superheater elements	1,82,000
Creosote	1,59,000
Motors, electric	1,55,000
Insulators	1,53,000
Antimony	1,48,000
Zinc	1,48,000
Hoses, I. R., canvas and pneumatic	1,48,000
Cranes, lifts, hoists	1,47,000
Brushes	1,47,000
Electrodes	1,47,000
Point rodding	1,42,000
Sheets, asbestos cement and accessories	1,37,000
Turpentine and rosin	1,37,000
Meters, electricity	1,35,000
Fire extinguishers	1,24,000
Belting	1,23,000
Weighing machines and weighbridges	1,20,000
Tractors	1,16,000
Meters, water	1,15,000
Grinding wheels	1,14,000
Boilers	1,02,000
Fencing materials	98,000
Roofing materials	94,000
Timber	91,000
Electrolyte	86,000
Cooking ranges and spare parts	82,000
Sea and river craft	82,000
Files , steel	80,000
Chemical apparatus	76,000
Oil, stand	76,000
Air compressor	75,000
Sanitary fittings	71,000
Calcium carbide	68,000
Telephone and signalling materials	68,000
Wood screws	64,000
Ball and roller bearings	58,000
Explosives	55,000
Locks	54,000
Soaps	52,000
Dust shields	50,000

Among the important contracts handled by the Department during the year the following may be specially mentioned.

	Rs.
(1) Rail cars for the N. W. Railway	14,20,000
(2) Steelwork for Cochin Harbour bridges	11,45,684
(3) M. G. goods wagons for Jodhpur Railway	7,50,000
(4) Hangars for the R. A. F., Ambala and Drigh Road ..	2,84,328

29. *Distribution of purchases.*—The statistics exhibited in Appendix VIII give the details of the distribution of the contracts placed by the Department among the various Provinces and Indian States. It will be observed that the business transacted by the Department continues to be widely distributed throughout the country.

30. *Rate and Running contracts.*—Particulars of the rate and running contracts concluded during the year are shown in Appendix IX. These contracts extend the benefits of rates obtained for bulk supplies to small demands and were increasingly utilised by all classes of indentors.

31. *Work done by Provincial Circles.*—The total value of purchases made during the year by the Provincial Purchase Circles of the Department at Calcutta, Bombay and Karachi, amounted to Rs. 97,07,328 as compared with Rs. 72,25,801, or an increase of 34·3 %. The number of indents received increased from 15,589 to 19,369 and the number of contracts placed from 25,074 to 27,244.

32. *The Calcutta Purchase Circle.*—The total value of stores purchased by this Circle was Rs. 63,27,241 as compared with Rs. 43,77,714 for the previous year, an increase of Rs. 19,49,527 or 44·5 per cent. Eleven thousand and thirtythree indents were received and 13,616 orders were placed by the Circle during the year, as against 9,059 indents and 12,738 orders during the year 1936-37.

During the year the capacities of 74 firms who applied for registration were investigated, and of these 46 were registered as approved contractors.

33. *The Bombay Purchase Circle.*—The total value of stores purchased by this Circle was Rs. 19,07,692 as compared with Rs. 16,37,210 during the previous year, an increase of Rs. 2,70,482 or 16·5 per cent. Three thousand seven hundred and one indents were received and 5,869 orders were placed by the Circle during the year, as against 2,967 indents and 5,488 orders during the year 1936-37.

Applications for registration were received from 53 firms of which 46 were reported on favourably.

34. *The Karachi Purchase Circle.*—The total value of stores purchased by this Circle was Rs. 14,72,395 as compared with Rs. 12,10,877 during the previous year, an increase of Rs. 2,61,518 or 21·6 per cent. Four thousand six hundred and thirtyfive indents were received and 7,759 orders were placed by the Circle during the year, as against 3,563 indents and 6,848 orders during the year 1936-37.

During the year 20 firms applied for registration, of which 6 were added to the list of approved contractors.

35. *Comparison with the London Stores Department.*—A comparison of the numbers and values of contracts for stores and freight placed by the India Store Department, London, with the numbers and values of the contracts made by the Indian Stores Department during the years 1934-35 to 1936-37 is shown in Appendix X. Appendix XI compares the values of contracts placed by the two organisations, for various authorities and classes of stores, during the same period. The figures relating to the London Stores Department have been converted into Indian currency at the rate of 1*s.* 6*d.* to the rupee. The figures of the London Stores Department for 1937-38 are not yet available.

CHAPTER IV.

WORK OF THE INSPECTION BRANCH.

Administrative Inspection Branch at Headquarters.

36. *General.*—The Inspection Branch at Headquarters acts as technical consultants to the Purchase and Intelligence Branches of the Department and to indentors. The main work of the Branch, therefore, is the preparation and revision of specifications and schedules of requirements, technical scrutiny of engineering indents and schemes and work connected with the electrical standardization and Standards and Specification Committees of Railways. Other important functions of the Branch include preparation and issue of drawings, work connected with standardization, custody and control of samples, work relating to development of indigenous products, technical advice to Purchase and Intelligence Branches of the Department and general control over the inspection work, including co-ordination of the technical activities of the Provincial Inspection Circles.

37. *Specifications.*—During the year under review, 9 specifications were framed, 88 were revised and 27 draft specifications were prepared although these have not so far been adopted. In addition to the preparation and revision of the I. S. D. Specifications, 5 specifications were scrutinized for the Central Standards Office for Railways.

A list of the I. S. D. Specifications which were current at the end of the year 1937-38 is given in Appendix XII.

Lists of these specifications are obtainable *gratis* and copies of specifications are procurable both in India and abroad on payment of annas 8 or 10*d.* per copy, from the following places :—

(1) The Manager of Publications, Civil Lines, Delhi.

(2) The Chief Controller of Stores, Indian Stores Department, New Delhi/Simla.

(3) Inspectorates of the Indian Stores Department at Calcutta, Bombay, Karachi, Lahore, Cawnpore and Madras.

(4) The High Commissioner for India, Publications Branch, India House, Aldwych, London. W. C.-2.

The Inspection Branch at Headquarters is also entrusted with the custody and keeping up to date of master copies of Army textile specifications. The total number of such specifications at the end of the year was 451 as against 357 at the end of the previous year.

38. *Schedules of Requirements.*—Two hundred and fortysix Schedules of Requirements were prepared during the year as against 273 in 1936-37 and 203 in 1935-36. Some of the more important Schedules of Requirements prepared and issued during the year are detailed below :—

(1) Eleven Diesel Rail cars and one power bogie for the North Western Railway.

(2) Two hundred I. R. S. metre gauge covered, four wheeled, wagons, type " M. C. J.", complete with wheels and axles, etc., for the Jodhpur Railway.

(3) Standard garages for the Military Engineer Services.

(4) An Aeroplane Hangar for the Royal Air Force (India).

(5) Lighting of Aerodromes for the Karachi-Jacobabad and Karachi-Bombay air routes for the Civil Aviation Department.

(6) Five K. W. Revolving type combined beacon and floodlights mounted on wheel trailer for the Civil Aviation Department.

(7) Installation of an air conditioning equipment in the All India Broadcasting studios at the Central Government Offices building, Bombay, for the Superintending Engineer (Aviation Circle), Central Public Works Department.

(8) Three 60-ton ammunition lighters for the Naval Store Officer, Bombay.

(9) Steel fumigation barge for the Indian Central Cotton Committee, Bombay.

(10) Crude oil engine driven shallow draught motor launch for Trimmu Headworks Division.

(11) Electrically driven high lift turbine pump with a capacity of 60,000 gallons per hour for the Chief Mining Engineer, Railway Board, Calcutta.

(12) Fabrication and erection of a two storied superstructure on an existing 80 feet × 66 feet pontoon for the Civil Aviation Flying Boat Base, Calcutta.

(13) Purification and filtration plant for the Army Headquarters.

(14) Track electrification equipment for the new Road Test Track, at the Government Test House, Calcutta.

(15) Electrically driven winch for the Flying Boat Base, Karachi.

(16) Vertical boilers for the G. I. P. Railway.

(17) Fume extraction plant for the Central Public Works Department, New Delhi.

(18) Electrically driven pumping plant transformer with H. T. circuit breaker and filtration plant for the Electrical Engineer, Bhopal Electric Supply.

(19) A 60 K. W. Diesel engine driven 440/500 volts generator with control panel for the Chief Engineer, Northern Command.

39. *Standardization.*—The Inspection Branch continued to give great attention to the important matters of standardization in order to secure the advantages which accrue both to the manufacturer and the buyer from the unification of standards and adoption of as few standards as possible consistent with efficiency and economy. During the year advantage was taken of every opportunity to effect further standardization in respect of stores purchased for Railway administrations, Posts and Telegraphs Department and other

Government departments. Some of the articles, in respect of which standardization work was carried out, are :—

Tin trays for the Posts and Telegraphs Department ; tape, cotton, for sealing wagons ; cardigan jackets ; hoses and carpets.

As in the past, the Central Standards Office for Railways and the Inspection Branch of the Department at Headquarters maintained the closest possible contact during the year. Technical officers of the Department attended meetings of the Standing Committee on Standards and Specifications for Indian Railways and of the Electrical Standards Committee.

40. *Preparation or scrutiny of technical schemes and advisory work.*—During the year 20 enquiries were received from various indenting officers asking for technical advice or other particulars, which were furnished.

41. *Custody and control of samples.*—A section of the Inspection Branch at Headquarters is entrusted with the work of receipt, classification, storage and issue of samples received against invitations to tender and those obtained for development and standardization purposes. It dealt with 10,024 samples during the year as against 10,189 samples in the previous year.

42. *Drawing Office.*—During the year there was an appreciable increase in the work connected with the drawings required in connection with the purchase and inspection activities of the Department. One thousand one hundred and sixtyfive I. R. S. drawings and 740 amendments were received from the Central Standards Office for Railways as compared with 823 drawings and 466 amendments in the previous year.

As in the case of I. S. D. standard specifications, a list of I. S. D. standard drawings is issued periodically. The lists are supplied gratis to those who apply for them and publicity regarding the standard drawings is given monthly in the Indian Trade Journal. Copies of these drawings are obtainable only from the Headquarters office of the Indian Stores Department, on payment.

During the year 55 drawings, 85 tracings and approximately 63,000 square feet of ferro and other prints were made in the Drawing Office as against 143 drawings, 182 tracings and approximately 53,000 square feet of ferro and other prints in the preceding year.

43. *Erection-at-site orders.*—Fiftyfour orders of this class were placed during the year aggregating in value, Rs. 19,71,234, as against fiftyone orders valued at Rs. 27,07,639 in 1936-37. Some of the more important of these are mentioned below :—

	Rs.
1. Rail cars for the North Western Railway	14,19,627
2. Generating sets for the M. E. S., Peshawar and Murree	1,01,616
3. Road rollers, Diesel, for the M. E. S. and P. W. D., Punjab, N. W. F. Province and Bombay	1,08,058
4. Lifts, electric, for the Public Works Department, Peshawar and Bombay and the North Western Railway	47,934
5. Steel Towers and Transmitter, Broadcasting, for the Controller of Broadcasting	43,733
6. Beacon and lighting installations for the Civil Aviation Department	39,957

44. *Arrangements for inspection of materials in the country of origin.*—Arrangements were made for inspection through the Director General, India Store Department, London, as in the past, in the case of stores manufactured abroad or of materials to be imported from abroad for use during manufacture in India, where inspection before despatch from the country of origin was considered necessary. As a result of expansion of the activities of the Purchase Branch, the number and value of orders entrusted to the Director General, India Store Department, London, for inspection, further increased during the year under review, but the arrangements made for pre-inspection of materials did not find favour with importing firms.

PROVINCIAL INSPECTION CIRCLES.

45. *Work done by the Provincial Inspection Circles.*—The total value of stores inspected by the Provincial Inspectorates during the year and charged on value aggregated Rs. 7,26,51,227 and the tonnage of material charged on weight basis amounted to 64,060 tons as against Rs. 5,84,79,755 and 62,731 tons during the preceding year.

The value of stores inspected against orders placed by the Department increased from Rs. 4,67,67,891 to Rs. 5,90,90,222 while the value of orders placed by other authorities, the inspection of which was carried out by the Department, increased by Rs. 18,49,141, that is, from Rs. 1,17,11,864 to Rs. 1,35,61,005.

The total number of orders (charged on value) received for inspection increased from 66,738 to 74,762, but their value decreased from Rs. 8,80,14,730 in the preceding year to Rs. 8,40,38,198 in the year under report. There was a substantial increase in the value of orders placed by the Indian Stores Department but it was more than set off by reduction in the value of orders placed by Railways, due to the fact that large orders for rolling stock covering a programme of three years, from 1937-38 to 1939-40, were placed duing the year 1936-37.

Full details of the work done are given in the sub-joined paragraphs and in Appendices XIII to XVI.

46. *The Calcutta Inspection Circle.*—During the year 32,667 orders were received for inspection against 29,860 orders during the previous year. The value of the orders received amounted to Rs. 5,17,24,544 against Rs. 6,14,46,243 in the previous year. The fall in the value of orders is due to the reasons explained in the preceding paragraph and does not represent any actual drop in inspection work. The value of departmental orders received for inspection increased from Rs. 2,40,31,035 in the year 1936-37 to Rs. 3,82,08,673 in the year under review, an increase of 58·9%.

The value of stores inspected against orders placed by authorities other than the Indian Stores Department and charged on value increased from Rs. 1,08,04,800 during the previous year to Rs. 1,27,08,044 for the year under review, an increase of 17·6%. An interesting feature of this increase is the greater extent to which the services of the Inspectorate have been utilised by private concerns and Indian States, on whose behalf the value of stores inspected increased from Rs. 4,705 in 1936-37 to Rs. 1,08,399 during 1937-38.

Two thousand six hundred and eleven wagons and underframes, valued at Rs. 1,13,02,092, were inspected during the year against 1893 valued at Rs. 70,69,574 inspected during the previous year. The quantity of stores inspected on a tonnage basis increased from 61,931 tons to 62,674 tons. The total number of cast iron plates, pots and steel sleepers inspected increased from 11,79,828 to 12,85,534.

An order deserving of special notice among those entrusted to the Department for inspection during the year was that for the Ponnai Bridge. This bridge, on the main Madras-Bangalore road at Tiruvalum, will, when completed, consist of eight spans of through girders, each having a distance between bearing centres of 123′-8″. The total value of the fabricated steel work including erection will be about 3½ lakhs of rupees. A photograph of a portion of the Bridge under construction appears as frontispiece.

Many bridges of much greater size, value, and intricacy of design or construction, have been dealt with in this Circle ; the interest lies in the fact that bridgework of this importance and magnitude had not hitherto been executed in the Madras Presidency. The Indian Stores Department were therefore requested to undertake the supervision of the work of fabrication and erection and an officer from the Calcutta Inspection Circle was specially deputed to Madras for the purpose. Modern methods of fabrication, producing interchangeability of components, were extensively employed and, with the co-operation of all concerned, workmanship and accuracy of a high standard have been attained. Since this work was undertaken, the Department has been asked to inspect a lesser, but still important, structural order entrusted to a Madras firm, and it is believed that the assistance thus given by the Indian Stores Department in these directions will act as a stimulus, which may not be without effect in the development of the Engineering Industries of the Madras Presidency.

The following are some of the other important orders received for inspection in the Circle during the year :—

	Rs.
1. 1,245 Wagons and underframes	65,58,399
2. 13,27,504 C. I. Plates, Pots (9,77,856) and steel sleepers (3,49,648)	41,55,239
3. Points and Crossings for N. W., E. B., and E. I. Railways	9,29,981
4. 1,761 tons and 26,27,900 Nos. of Dogspikes	4,87,694
5. C. I. pipes and specials	3,29,238
6. C. I. anchor plates for N. W. Railway	3,27,640
7. Pig iron	3,07,425
8. M. S. tie bars for E. I. Railway	2,62,500
9. Axleboxes	2,49,066
10. Rail anchors for N. W. and E. I. Railways	1,82,257
11. (a) C. I. screws for Brooking Street Wharf, Rangoon (b) C. I. screws and span girders, Assam	92,746
12. Turnouts for E. I. Railway	77,400
13. Steelwork for Mysore Railways saw mill	64,690

14. Plate girder spans 43′-10¼″ centres of bearing for N. W. Railway	61,299
15. Trough plates for Buckland Road Weighbridge for E. I. Railway	56,988
16. Three 10-ton capacity overhead electric travelling cranes, for P. W. D. Central Workshops, Amritsar	55,152
17. I. R. springs for E.I. and G. I. P. Railways	52,000
18. Ten sets of Floaters for Port Engineer, Vizagapatam Port ..	44,230
19. (*a*) Sheds for transhipment platform at Juhi-Cawnpore-Allahabad Division, E. I. Railway .. .. (*b*) Sheds for a foot overbridge at Mokamah Junction, E. I. Railway.	42,774
20. Axleguards for N. W. Railway	40,875
21. Pig lead	40,000
22. Jaws for G. I. P. Railway	37,384
23. 85′-0″ Turntable for E. B. Railway	35,699
24. Tonum dynamos for E. B. Railway	30,000
25. Duplicated capping girders for E. B. Railway (1 Span 44′-11″ and 1 span 44′-0″)	29,367
26. Iron cells	27,959
27. Steel tower for Controller of Broadcasting	27,563
28. Point rodding for N. W. Railway	27,329
29. Steelwork for 10 spans 60′-0″ girders for Gurrah Bridge, E. I. Railway	26,675
30. Andaman padauk squares for Jodhpur Railway	26,288
31. C. I. cylinders for Cochin Harbour	22,960
32. Batteries for E. B. Railway	20,880
33. Trucks for Chief Forest Officer, Port Blair	19,420
34. Motor boat for E. B. Railway	18,439
35. Joint boxes with cables for Colliery Superintendent, Giridih ..	17,517
36. Train lighting dynamos for E. B. Railway	16,569
37. C. I. rope drums for Public Works Department, Central Workshops, Amritsar	14,885
38. M. S. bearing plates	14,368
39. An open type cabin at Sealdah, E. B. Railway	11,249
40. Steel work for a footbridge at Phaphund Station, E. I. Railway ..	10,294
41. Four 100-feet span girders for E. I. Railway	10,138

There was an increase in the number of orders specifying inspection after erection at site, 26 orders having been dealt with against 11 in the previous year.

The works and premises of 35 firms were inspected during the year under review. Of these 26 firms were recommended for registration as "approved contractors".

47. *The Bombay Inspection Circle.*—There has been an appreciable increase during the year in the work of this Inspectorate. The number of orders received for inspection during the year was 17,786 as compared with 15,762

in 1936-37, their value being Rs. 1,30,18,453 as against Rs. 1,14,01,409 in the previous year.

The bulk of the work relates to the inspection of orders placed by the Department itself. The number of such orders received for inspection increased from 15,656 to 17,666, their value rising from Rs. 1,10,29,324 to Rs.1,23,68,291. The number of demands received for inspection from other authorities also increased from 106 to 120 and their value from Rs. 3,72,085 to Rs. 6,50,162. The tonnage of material inspected on weight basis was 145 tons as compared with 96 tons during the preceding year.

Some of the important orders dealt with during the year were as follows :—

	Value. Rs.
1. Steel trestles for combined road and rail bridge for Cochin harbour	1,54,563
2. Points and Crossings for Railways	1,08,462
3. Train lighting cells and equipment for the Great Indian Peninsula Railway	71,607
4. Steelwork for Jumna Bridge for the B. B. and C. I. Railway ..	63,008
5. Girders for the Gomti Bridge for the Rohilkhand and Kumaon Railway	41,393
6. Steam road rollers for the Superintending Engineer, Nagpur, and Electrical Engineer, Southern Command	40,435
7. Railway body fittings for the East Indian Railway	32,692
8. Steelwork 4-40 feet span deck type girders for the S. I. Railway ..	14,105

Two erection at site orders were inspected during the year, details of which are given below :—

	Value Rs.
1. Platform weighing machines for the Great Indian Peninsula Railway	28,850
2. Turbine pump, electrically driven, for the Commander Royal Engineers, Bombay	8,046

The works of 32 firms were inspected, out of which 20 were recommended for registration as 'approved contractors.'

48. *The Karachi Inspection Circle.*—The year under report shows a substantial increase, both in the number and value of orders dealt with in this Circle during the year, as compared with those of the preceding year. The steady increase since the year 1932-33 in the volume of work of this Inspectorate was maintained.

The number of orders received for inspection during the year was 10,343 valued at Rs. 93,12,409, as against 8,278 orders valued at Rs. 64,96,546 in the previous year. The number of demands received for inspection from other departments rose from 6, amounting to Rs. 40,138, to 10, valuing Rs. 65,069. The number of orders actually inspected during the year increased from 8,196 to 9,793 and their value from Rs. 63,61,616 to Rs. 82,06,633.

As in the past, hardware, miscellaneous, engineering and electrical stores formed the bulk of materials inspected by this Circle.

Petrol, kerosene oil, fuel oil, lubricating oils and greases, road dressing materials, paints and varnishes, disinfecting fluids, liquid chlorine, calcium carbide, etc., to the value of Rs. 17,88,156 were inspected ; all of these with a few exceptions were against the Indian Stores Department contracts. The value of materials inspected which were wholly or partly fabricated in Karachi rose from Rs. 4,73,458 to Rs. 7,44,539. Some of the important orders dealt with were :—

	Rs.
1. Steelwork for Abattoir for Army Headquarters	3,26,940
2. Iron charpoys for the M. E. S.	2,04,608
3. Steelwork for hangar for the R. A. F.	61,248
4. Screw gates and cross regulators for Khairpur State	22,464
5. Platform shelter for Jodhpur Railway	18,060
6. Wheels and axles for trollies for the N. W. Railway	17,630
7. Steel roof trusses for Garrison Engineer, Wana	16,592
8. Crossings complete with check blocks for Bikaner State Railway ..	16,320
9. Petrol tanks for the M. E. S.	10,891

Seventeen orders were inspected and tested at site, the more important of which are detailed below :—

	Rs.
1. Pulver grinder, mixer and caterpillar power units for Irrigation Department, Quetta	52,146
2. Caterpillar tractor and *La Plant Choate* Trail builder for the M. E. S., Quetta	32,059
3. Road rollers for the M. E. S., Quetta	28,958
4. Sliding, surfacing and screw-cutting lathe, boring mill and shaping machine for N. W. Railway	28,730
5. Road rollers for the Special Road Engineer in Sind	25,931
6. Caterpillar power units for the M. E. S., Quetta	24,512

49. *The Upper India Inspection Circle.*—The number of orders received for inspection during the year was 5,732 as compared with 5,703 in 1936-37. The value of such orders was Rs. 54,30,634 as against Rs. 54,13,174 in the previous year.

Some of the important orders inspected during the year were :—

	Rs.
1. Train lighting dynamos for the North Western Railway	2,36,430
2. Overhead travelling cranes and electric traversers for the North Western Railway	1,47,896
3. Road rollers for the P. W. D., Punjab and N. W. F. Province, and the M. E. S., Ambala and Delhi	44,758
4. Horizontal surfacing, boring, milling, drilling and tapping machine for the North Western Railway	40,899
5. Electrodes for the North Western Railway	40,346
6. Generating set for the M. E. S., Kohat	35,461
7. Electrolyte for train lighting cells for the North Western Railway	34,930
8. Caterpillar No. 10 auto patrol for the P. W. D., Punjab	28,303

		Rs.
9.	Portable crude oil engine driven air compressor set and electrically driven petr l pumps for the M. E. S., Peshawar	27,393
10.	Generating set for the M. E. S., Razmak	22,980
11.	High speed shaping machine and sliding, surfacing and screw-cutting lathes for the North Western Railway	22,482
12.	Railway wagon weigh bridge and plain horizontal milling machines for the North Western Railway	19,015
13.	Pressed steel axle pulleys for the North Western Railway ..	16,666
14.	Arc welding set for the North Western Railway	13,344
15.	Mysore pig iron for the P. W. D., Central Workshops, Amritsar ..	11,900

Eightysix 'erection at site' orders for plant and machinery were dealt with during the year as against ninetyone in 1936-37.

The works of 19 firms were inspected, out of which 14 were recommended for registration as 'approved contractors'.

50. *The Cawnpore Inspection Branch*.—The number of orders received for inspection rose from 2,967 to 3,270 and their value increased from Rs. 17,36,625 to Rs. 29,83,819.

The work of this Inspectorate is chiefly connected with the inspection of general, hardware and engineering stores, oils, textiles, leather goods, etc., of purely indigenous manufacture. Departmental and outside orders for the inspection of permanent way material for Railways were also received during the year. The total value of such orders amounted to Rs. 6,10,688. One thousand two hundred and forty tons of tie bars, as against 691 tons in 1936-37, were inspected for the E. I. Railway. Two orders amounting to Rs. 2,760 were received during the year from the Palestine Government for the inspection of tents and durries.

The works of 12 firms were inspected, out of which 8 were recommended as 'approved contractors'.

51. *The Madras Inspection Branch*.—The number of orders received for inspection in this Inspectorate rose from 4,168 in 1936-37 to 4,964 in 1937-38. The work in this Inspectorate mostly relates to the inspection of orders placed by the Department itself and the number of such orders increased from 4,151 in the preceding year to 4,946 in the year under report. The value of such orders received for inspection during the year amounted to Rs. 15,38,248 as against Rs. 14,95,331 during the preceding year. In addition to the orders placed by the Indian Stores Department, eighteen orders for textile stores of the value of Rs. 30,091 were inspected on behalf of the Mysore Government as against seventeen such orders of the value of Rs. 25,402 inspected on their behalf during the preceding year. The total value of orders received for inspection thus amounted to Rs. 15,68,339 against Rs. 15,20,733 during the year 1936-37.

The steady increase in the inspection of hardware and miscellaneous engineering stores was maintained. The value of such stores inspected during the year was Rs. 11,87,530 as against Rs. 10,81,750 in 1936-37. The total value of textile stores inspected, however, decreased from Rs. 4,23,909 to Rs.3,98,874. This small decrease in value was due to smaller quantity of khaki and bleached goods purchased from firms located in this area.

CHAPTER V.

The Metallurgical Inspectorate, Tatanagar.

52. *Work done.*—The year 1937-38 records an all-round improvement in the work of the Metallurgical Inspectorate. The tonnage of materials inspected during the year, and charged on weight, aggregated 3,71,549 tons as compared with 2,73,644 tons in the preceding year and the highest previous record of 3,36,368 tons handled during 1926-27. Stores inspected and charged on value amounted to Rs. 21,80,959, as against Rs. 13,39,101 during the preceding year. The total value of stores inspected during the year is estimated at Rs. 501 lakhs approximately, the corresponding figure for the preceding year being Rs. 357·2 lakhs only.

Full details of work done by the Inspectorate for the various authorities during the year as compared with the three preceding years are furnished in appendices XIII to XV and XVII.

A list of stores, with their values, which came under inspection during the year, is given below:—

Material.	Quantity inspected and passed.	Value.
	Tons.	Rs.
Rails, ordinary	40,494	40,49,400
Rails, chrome	2,283	2,85,375
Rails, manganese	32,102	38,57,788
Fishplates, high carbon	3,017	4,39,467
Fishplates, ordinary	25	3,250
Structural, routine	2,81.260	3,51,57,500
Structurals	13,526	19,64 439
Structurals, Lloyds	5	1,100
Plates, Lloyds	1,179	2,59,380
Steel sleepers	2,155	2,47,825
Tie bars	1,015	1,88,823
M. S. Sheets	25	8,115
Galvanised plain sheets	27	8,088
Galvanised corrugated sheets	501	1,01,260
Cables, routine..	56,48,712 Yards	14,12,178
Cables, other	2,13,989 ,,	70,083
Copper conductors	650 Tons	6,34,361
Steel wires	64	17,278
Steel nails	25	6,991
Barbed wire	6	1,813
Agrico implements	69,061 Nos.	73,352
Pig iron	1,575 Tons	1,24,275
Oxygen gas	2,89,000 Cft.	11.560
Ammonium sulphate	7,055 Tons	6,84,335
Red oxide	40	5,200
Lead sleeves	450 Nos.	1,094
Jumper wire	20,000 Yds.	13,200
Ship quality plates	31 Tons.	6,896
M. S. rounds	22	4,715
Steel sections, routine (Indian Steel Wire Products)..	2,337	4,90,770

Messrs. The Tata Iron & Steel Co., Ltd.—As usual, the major portion of the work done by the Metallurgical Inspectorate related to the inspection of rails and fishplates against the demands of the Railway Board and other parties, and certification of structural steel manufactured by Messrs. The Tata Iron & Steel Company, Ltd.

The Railway Board's demand was 71,987 tons of rails and 2,806 tons of fishplates during 1937-38 compared with 79,115 tons of rails and 2,795 tons of fishplates in the previous year. Demands from other sources, including Railways owned and managed by Indian States, amounted to 10,492 tons of rails and 316 tons of fishplates against 4,631 tons of rails and 117 tons of fishplates in 1936-37. During the year the supplies made represented 64,881 tons of rails and 2,806 tons of fishplates against the demands of the Railway Board, and 9,502 tons of rails and 293 tons of fishplates for other services, which included Bikaner State, Gondal and Udaypur Chittorgarh Railways. Thus, the aggregate supply was 74, 383 tons of rails (including 30,626 tons of medium manganese steel rails and 2,023 tons of chrome steel rails) and 3,099 tons of fishplates, as against 79,039 tons of rails and 2,869 tons of fishplates during the preceding year.

Messrs. The Tata Iron and Steel Company, Ltd., submitted for test and certification 3,75,011 tons of structural steel involving supervision of 13,170 tensile tests against 2,36,980 tons and 9,075 tensile tests in 1936-37.

There has been a decline in the orders for steel sleepers, and the Steel Company supplied only 28,227 pieces (2,155 tons) of sleepers to the North-Western, South Indian, Bombay, Baroda and Central India, and Bombay Port Trust Railways, while 2,19,602 sleepers weighing 16,747 tons were supplied during 1936-37.

Approximately 1,179 tons of ship quality plates and 5 tons of structural steel were inspected and passed to Lloyds specification during 1937-38 as against 124 tons of plates in the previous year.

In addition to the above, Messrs. The Tata Iron and Steel Company continued to supply various steel sections for the construction of the New Howrah Bridge. The materials inspected and passed by the Metallurgical Inspectorate for this purpose amounted to 7,886 tons against 2,133 tons in 1936-37.

The Company also executed orders placed by the Indian Stores Department comprising rails, fishplates, pig iron, tie bars, sheets, plates, etc., the total value of which amounted to Rs. 13,47,000 approximately.

The Agricultural Implements Department of Messrs. The Tata Iron and Steel Co.—The Agricultural Implements Department put up 68,779 pieces of track tools for inspection against orders placed by the Indian Stores Department, as compared with 63,163 pieces in the preceding year. In addition to the above, the Company supplied a small order of 282 hammers against the requirements of the Director of Contracts, Army Headquarters.

The Indian Cable Company Ltd.—During the year, the Indian Cable Company, Ltd., Tatanagar, put up for routine certification 60,457 coils

(56,48,712 yards) of cables involving 9,919 electrical tests against 47,710 coils (43,81,780 yards) involving 9,062 electrical tests in 1936-37. The figures indicate a marked increase in the work of this Company.

The firm, in addition to the above, supplied 2,13,489 yards of cables and 645 tons of copper conductors against orders placed by the Indian Stores Department. The corresponding figures for the previous year were 97,829 yards and 730 tons of copper conductors.

The Indian Steel & Wire Products, Ltd.—The Company submitted 2,337 tons of steel sections for test and certification to British Standard Specification during the year under review as against 2,696 tons in 1936-37. The work involved 87 tensile tests and 487 bend tests against 138 tensile tests and 578 bend tests in the previous year. They also supplied steel bars, wires, nails, etc., of the value of Rs. 28,109 against orders placed by the Indian Stores Department.

The Indian Oxygen and Acetylene Co., Ltd.—During the year 2,89,000 Cft. of Oxygen gas supplied by the Indian Oxygen and Acetylene Company, Ltd., against Indian Stores Department Orders were tested.

53. *Tests and Estimations.*—The number of estimations of carbon, silicon, manganese, sulphur, phosphorus, chromium, etc., totalled 23,724 which marked a substantial increase over the previous year's figure of 21,443. The figure includes miscellaneous estimations amounting to 1,506 in number which comprise determinations of spelter, nickel, copper, zinc, lead, tin, etc.

During the year 12 samples of ammonium sulphate representing various consignments of 7,055 tons which involved 63 chemical determinations were taken on behalf of the Sulphate Federation. The corresponding figures for 1936-37 were 12 samples of 5,720 tons with 66 determinations.

The aggregate number of mechanical tests effected in 1937-38 was 1,03,672 including 87 tensile tests and 487 bend tests carried out in the routine testing and certification of the products of the Indian Steel and Wire Products, Ltd., as against 68,946 in the preceding year, including 138 tensile tests and 578 bend tests for the Indian Steel and Wire Products, Ltd.

The above figures are exclusive of 2,124 tensile tests on copper conductors and 9,919 electrical tests and 1,568 wrapping, twisting and tinning tests for the certification of cables and copper conductors. The corresponding figures for 1936-37 were 2,176 , 9,062 and 1,442 respectively.

54. *Investigations.*—Sixtysix investigations were handled during the year bringing a revenue of Rs. 4,730 as against 48 investigations which earned Rs. 2,696 during 1936-37.

These 66 investigations involved 311 tests and 282 chemical determinations against 325 tests and 264 determinations in the previous year, and covered materials of various descriptions which failed in service and were sent to the Inspectorate to ascertain the causes of failure. Although the fees earned from this source do not materially affect the revenue of the Inspectorate, yet the advantages derived from the work solve many a difficulty of both the consumers and the manufacturers.

The following are examples of a few of the important investigations undertaken by the Inspectorate during 1937-38 :—

(*a*) A Railway Engineer forwarded a few bridge rivets to ascertain the cause of their breakages. It was stated that an old bridge on the railway required strengthening. It was found that it was impossible to place the required number of rivets in the strengthening members, and it was suggested that fewer rivets should be used but they should be of special steel. The suggestions were made and effected prior to 1914. On examination of the bridge recently some of these rivets were found to have fractured and were sent for investigation. After examination it was suggested that other rivets in the bridge should be examined. Acting on this suggestion the Engineer discovered many broken rivets. A recommendation was made that in place of the these special steel rivets, rivets of high tensile steel should be used.

(*b*) A distorted sluice gate shaft of a canal was submitted for determining the cause of twist. The investigation undertaken showed that for the given stress under which the gate worked, the quality of the material was suitable, the reason for distortion being probably traceable to the erroneous running of the sluice gate lifting gear.

(*c*) An axle-box wedge of a locomotive engine which was pitted, said to be due to corrosion, was submitted for examination and opinion as to the cause of the corrosion and how it could be prevented. It was pointed out that it was not a case of corrosion, and that the trouble could be overcome if a steel of a different composition was used.

(*d*) A private firm desired the Inspectorate to undertake the investigation of a broken shaft of an ore-crusher, with a view to ascertaining if the quality of metal used for the shaft was suitable for the purpose. The results of the investigation showed that the fault did not lie in the quality of metal used, but was in the design of the shaft.

(*e*) Certain breakages in points and crossing rails occurred on a railway. The rails involved were sent to the Inspectorate for examining their suitability for the purpose. Investigations carried out showed that the rails were perfectly suitable, but the fractures occurred due to maltreatment.

55. *The Steel Ingots (Excise Duty) Order, 1934.*—The Metallurgical Inspector continued to function as the Collector of Excise under the Steel Ingots (Excise Duty) Order, 1934. The excise duty realised was as usual accounted for through the books of the Accountant-General, Bihar.

To claim drawback of excise duty on steel material manufactured from excised ingots and exported out of India, statements in the statutory form appended to the Steel Ingots (Excise Duty) Order, 1934, were submitted by

the exporters of such material for certification by the Metallurgical Inspector. Nine hundred and seventytwo forms were endorsed and certified, after necessary verification and check, during the year under review, while only 53 such certificates were issued in the previous year. The increase was due to the separation of Burma from India and export of the material to the former country. Nine hundred and forty refund orders involving payment of Rs. 1,21,460-5-0 to the exporters were issued during the year while only 108 orders involving a payment of Rs. 30,882-13-4 were issued in the preceding year.

In addition to the above, the Metallurgical Inspector issued 927 certificates, as compared with 1,161 in 1936-37, to enable Messrs. The Tata Iron and Steel Company to claim countervailing duty on rails and fishplates supplied under the Railway Board's contract to different Railways in India.

CHAPTER VI.

The Government Test House, Calcutta.

56. *General.*—Last year it was possible to report a substantial increase in the work carried out at the Government Test House, after several years of fluctuating records. The improvement recorded during the previous year was more than maintained during the year under review, in spite of the fact that owing to important building alterations and extensions certain items of work were interrupted to an appreciable extent. Gratifying progress was also made in practically all the items of work undertaken by the Research Branch. An account of the activities of the Research Branch has, as before, been included in the Administration Report of the Industrial Research Bureau, which has been published separately.

The total number of samples tested and reported by the Physical and the Chemical sections during the year under review was 9,085 as against the figure of 9,026 recorded for the previous year. The volume of work carried out on behalf of the Indian Stores Department again showed a substantial increase, the figures for the year under review and the previous year being 6,082 and 5,672 samples respectively. Increases were also recorded in the work carried out on behalf of private concerns, public bodies, and Civil departments of the Central Government. On the other hand, the work carried out on behalf of the Defence Department, the various Railways, and the Provincial Governments was less than in the previous year.

The complete figures relating to the numbers of samples tested on behalf of the various Government departments, Railways, public bodies, private concerns, etc., during the year under review are shown in Appendices XIII and XVII, which also include the corresponding figures for the previous three years. A list of materials tested during the year is given in Appendix XVIII.

A large number of visitors from several centres of technical and scientific education and industrial activities in India were conducted round the laboratories during the year. Batches of students, accompanied by their teachers, of the following institutions visited the laboratories by appointment:—

1. Kalabhaban Technical College, Baroda.
2. College of Engineering, Guindy, Madras.
3. Benares Engineering College, Benares.
4. The Technological Department of Bombay University.
5. Hyderabad College, Hyderabad.
6. Bihar Engineering College, Patna.
7. Andhra University.
8. Forman Christian College, Lahore.

57. *Physical Section.*—The total number of samples tested in the Physical section during the year was 4,839 as against 4,979 samples tested during the previous year. As the difference between the figures represents a decrease of less than 3%, the ground gained during the previous year may be regarded as practically maintained.

The numbers of samples tested on behalf of the Indian Stores Department, the Civil departments of the Central Government and the Indian States showed appreciable improvement, while those on behalf of the Defence Department, the Railway Administrations, the Provincial Governments, public bodies and private concerns showed varying decreases. The variations under different headings are shown below :—

	Number of samples tested in	
	1937-38.	1936-37.
1. Indian Stores Department	3,326	2,910
2. Civil departments of the Central Government ..	186	124
3. Indian States	9	1
4. Defence Department	58	178
5. State-worked Railways	79	251
6. Company-worked Railways	104	249
7. Railways worked by Indian States	..	8
8. Provincial Governments	119	155
9. Public bodies	147	169
10. Private concerns	811	934

The numbers of samples tested in the Cement and the Electrical sub-sections showed varying increases during the year under review, as indicated by the following figures :—

	Number of samples tested in	
	1937-38	1936-37
1. Cement sub-section	915	907
2. Electrical sub-section	1,356	793

The increase of work in the Cement sub-section is principally due to the larger number of samples of rapid-hardening cement tested during the year. The very substantial increase of work in the Electrical sub-section is mainly due to the larger number of samples of cables, fans, electrical fittings, lamps, house service meters and primary cells tested during the year.

The numbers of samples tested in the Heavy Mechanical, the Light Mechanical and the Textiles sub-sections decreased during the year under review, as indicated by the following figures :—

	Number of samples tested in	
	1937-38.	1936-37.
1. Heavy Mechanical sub-section..	959	1,219
2. Light Mechanical sub-section	684	812
3. Textiles sub-section	925	1,248

The decrease of work in the Heavy Mechanical sub-section is mainly due to the smaller number of cement concrete blocks and bricks tested during the year and to the 100-ton Buckton testing machine remaining idle for approximately eight weeks during the removal of the pumping plant and the accumulator in connection with the building extensions. The decrease in the number of samples tested in the Light Mechanical sub-section is mainly due to the smaller number of miscellaneous samples tested during the year, and in the Textiles sub-section to a smaller number of textile samples tested on behalf of the Indian Stores Department.

58. *Special Investigations* (*Physical*).—In addition to the routine testing, the following special investigations were either completed or in progress during the year :—

(1) Investigation of the effect of khaki mineral dye on the tensile strength of cotton twill cloth in the air-dry and in the saturated conditions.

(2) Investigation with a view to developing a suitable laboratory test on railway fog signals.

(3) Investigation of the effect of storage on the insulation resistance of the new 250 volt 3-layer V. I. R. dielectric C. M. A. standard cables.

(4) Investigation to determine the suitability of Indian magnesium chloride and Indian magnesia for use as building materials for making oxy-chloride cements.

(5) Investigation to determine the variation of the hardness and the crushing strength of bearing metals of various compositions at elevated temperatures.

(6) Investigation to determine the suitability of leathers tanned in India for making hydraulic cups.

(7) Investigations of the suitability of various additional tests on vulcanised India rubber and on reinforcement fabrics for determining the relative qualities of pneumatic and water delivery hoses.

(8) Comparative tests to determine the life of motor car head light lamps under vibration.

(9) Tests to determine the comparative surface and core hardnesses of cement concrete and cement mortar slabs both when untreated and treated on the surface with sodium silicate and ' sealocrete '.

(10) Comparative tests to determine the effectiveness of locally made as well as foreign sleeper clamps to prevent longitudinal cracking of wooden sleepers in railway permanent ways.

(11) Investigation to determine the suitability of steatite blocks from an Indian State for various commercial purposes, e. g., for making talc powder.

59. *Specifications (Physical).*—The following specifications were reviewed in the Physical section during the year under review :—

(1) I. S. D. specification for unlined flax canvas fire hose.

(2) Draft I. S. D. specification for boiler washout hose.

(3) Draft I. R. S. specification for armoured cable multicore for signalling purposes, 250 volt 600 megohms grade.

(4) I. R. S. specification for flat split cotters.

A number of draft British Standard specifications were also commented upon during the year.

60. *Chemical Section.*—The total number of samples tested by the Chemical section including the Oil sub-section during the year under review was 4,246 as against the figure of 4,047 recorded for the previous year. This represents an increase of about 5%. The separate figures for the General Chemical sub-section and the Oil sub-section are as follows :—

	Number of samples tested in 1937-38	1936-37
1. General Chemical sub-section	2,936	2,939
2. Oil sub-section	1,310	1,108
	4,246	4,047

It will be seen from the above figures that while the number of samples tested in the General Chemical sub-section during the year under review was practically the same as that recorded for the previous year, the figure for the Oil sub-section showed substantial increase.

The following figures show how the work carried out during 1937-38 on behalf of the various authorities compares with that of the previous year :—

Department.	Number of samples reported in 1937-38.			Number of samples reported in 1936-37.		
	Chemical Laboratory.	Oil Laboratory.	Total.	Chemical Laboratory.	Oil Laboratory.	Total.
1. Indian Stores Department ..	1,948	808	2,756	2,079	683	2,762
2. Central Government Departments (Civil)	159	40	199	124	14	138
3. Defence Department	29	217	246	67	160	227
4. Provincial Governments ..	62	18	80	55	34	89
5. State worked Railways	79	16	95	87	33	120
6. Company-worked Railways ..	42	..	42	52	2	54
7. Railways worked by Indian States.	16	..	16	39	..	39
8. Indian States ..	21	..	21	12	1	13
9. *Quasi*-public bodies	77	31	108	60	13	73
10. Private concerns..	503	180	683	364	168	532
Total number of samples reported.	2,936	1,310	4,246	2,939	1,108	4,047

The work carried out on behalf of the Indian Stores Department remained on practically the same level as that of the previous year, while varying increases were shown by the work carried out on behalf of the Central Government departments (Civil), the Defence Department, Indian States, public bodies and private concerns. The increase in the total figure for the Defence Department was again due to the larger number of samples of aviation spirit received for test during the year. Other types of work on behalf of this Department showed a further decrease. Minor decreases were shown by the work carried out on behalf of the Provincial Governments, and Railway Adiministrations.

The following figures refer to the four most important items in the Chemical section, namely, (1) paints, varnishes, etc., (2) lubricating oils, (3) coal and (4) aviation spirit. These figures show that while the number of samples of paints, varnishes, etc., tested declined, the remaining three items recorded varying increases. The increase in the case of aviation spirit was specially marked.

	1937-38.	1936-37.
Number of samples of paints, varnishes, etc., tested ..	768	843
Number of samples of lubricating oils tested	536	522
Number of samples of coal tested	188	158
Number of samples of aviation spirit tested	233	65

61. *Exposure Test Panels.*—The total number of panels (steel and wood) painted with paints, enamels, varnishes, cellulose lacquers, etc., which have been exposed since the commencement of the exposure test work reached 2,052. Of these, 167 panels (161 steel panels and 6 wooden panels) were exposed during the year under review. Thirty panels out of the above number were prepared on behalf of the Railway Board and exposed in batches of six each at five exposure centres, namely, Alipore, New Delhi, Lahore, Bombay and Madras. The total number of panels exposed on payment on behalf of firms to the end of the year was 208.

In addition to painted panels, 8 steel panels intended for atmospheric corrosion tests were exposed on behalf of the Railway Board at each of the four exposure centres, namely, Alipore, New Delhi, Lahore and Bombay.

62. *Standard Samples.*—The total number of standard samples of paints, enamels, varnishes, etc., received up to the end of 1937-38 was 3,441. The number of standard samples tested during 1937-38 was 111 and 622 samples remained to be tested at the end of the year. The number of new standard samples of lubricating oils tested during the year under review was 132. Special tests were carried out on 25 samples during the year.

63. *Special Investigations (Chemical).*—The special investigations carried out by the Chemical section during the year included the following :—

(1). Investigation of the action of casein on aluminium sheet and paper when paper is mounted on aluminium sheet using casein as an adhesive.

(2). Investigation of the suitability of various indigenous vegetable oils for use in boilermakers' lamps.

(3). Investigation of the corrosive properties of axle oil admixed with varying small percentages of free fatty acid.

(4). Investigation of the burning qualities of kerosenes in I. P. T. Burning Test Lamps and I.R.S. ' C. I. ' type Signal Lamps fitted with I. R. S. one-day burners.

(5). Investigation of the electric strength of insulating varnishes.

(6). Investigation of the atmospheric corrosion of various steels and rails.

64. *Specifications (Chemical).*—The following specifications were framed during the year :—

(1). Specification for paint olive green, special, on behalf of the Calcutta Purchase Circle, Indian Stores Department.

(2). Draft I. S. D. specification for enamel, electro-insulating grey.

The following specifications were commented upon :—

(1). Draft I. S. D. specification for disinfectants.

(2). Draft B. S. specification for pure lac for insulating purposes.

(3). Draft revised B. S. specification for oil paste (Coloured) for Paints.

(4.) Report of the Sub-committee of the International Executive Council of the World Power Conference on the specification for coal.

(5). R. I. A. S. C. specification for Aviation Spirit D. T. D. 224.

65. *Extensions to the Buildings.*—The activities of the Test House have been steadily expanding since its amalgamation with the Indian Stores Department in 1922, and though additional accommodation has been provided from time to time, such additions have not kept pace with developments. Apart from the normal requirements of the Test House, accommodation is also required for the growing needs of the Industrial Research Branch. A scheme of extensions was accordingly submitted to the Government of India in August 1936, which was estimated to cost approximately Rupees three lakhs. An allotment of Rs. 75,000 was sanctioned by the Government of India in the estimates for 1937-38, as a first instalment of the scheme, and a double storey wing in the main building, and a number of outbuildings which were urgently required, were completed during the year, through the agency of the Central Public Works Department.

66. *Plant and apparatus.*—Several additions were made to the testing plant and apparatus at the Government Test House during the year. A complete list of the plant and equipment available for testing various classes of materials is given in Appendix XIX.

CHAPTER VII.

Registration of Firms.

67. *Registration of firms in the Headquarters list.*—The number of firms registered on the books of the Department as approved manufacturers or suppliers of stores of various descriptions increased from 3,658 at the end of the year 1936-37 to 3,878. Full details of this number indicating the areas in which they are located and the classes of stores they manufacture or supply are given in the following statement :—

Description of stores.	Bengal.	Bombay.	Sind.	Madras.	Punjab.	United Provinces.	Delhi.	Burma.	Bihar.	Central Provinces.	Assam.	N.-W. F. P.	Other than British possessions.	Firms outside India.	Total.
1. Stores falling under Rule 4 of the Rules for the supply of articles required to be purchased for the public service :—Important plant and machinery and iron and steel work ..	30	7	3	1	1	2	..	1	2	..	..	..	..	1,173	1,220
Other stores.															
2. Railway materials	78	53	5	11	16	4	11	8	5	..	1	..	1	73	266
3. Mechanical equipment	181	146	25	35	39	18	26	32	4	..	1	1	8	268	784
4. Electrical equipment	120	100	20	27	30	14	24	15	3	..	..	1	9	175	538
5. Structural engineering	21	7	3	1	4	2	7	3	..	..	..	..	2	1	51
6. Hardware	117	37	24	25	39	38	19	13	4	1	1	1	13	59	391
7. Implements and tools	71	49	10	15	23	15	13	11	1	..	2	1	5	56	272
8. Metals	101	69	16	17	21	10	18	15	5	1	..	1	3	37	314
9. Oils	58	37	4	15	13	12	7	8	1	..	2	..	9	13	179
10. Paints	66	46	14	17	8	2	8	8	2	1	2	..	6	22	202
11. Chemicals (excluding medicines and drugs) ..	57	29	8	8	12	9	8	9	1	..	..	..	3	5	149
12. *Textile stores.*															
(*a*) Cotton materials	95	87	5	12	48	44	26	10	..	5	..	4	9	18	363
(*b*) Woollen materials	25	21	2	6	17	24	10	2	..	..	..	3	13	2	125
(*c*) Jute, flax and hemp materials	66	25	6	3	19	8	4	5	1	1	..	..	3	9	150
(*d*) Silk goods	..	..	..	..	..	1	..	..	..	..	..	..	1	8	10
13. Leather goods	23	18	4	3	13	22	5	3	..	..	..	1	..	1	93
14. Miscellaneous stores	334	243	50	62	120	81	81	44	8	12	3	3	26	143	1,210
15. Scientific instruments and Laboratory equipment	33	16	1	6	10	5	3	2	..	1	..	..	..	19	96
Total ..	1,476	990	200	264	433	311	270	189	37	22	12	16	111	2,082	6,413
Overlapping figures for firms registered for more than one item.	896	585	102	130	161	115	132	120	10	5	9	5	46	219	2,535
Net Total ..	580	405	98	134	272	196	138	69	27	17	3	11	65	1,863	3,878

68. *Registration of firms on local Purchase Circles Lists.*—In addition to the number of firms mentioned in the preceding paragraph, 36 firms were added to the local lists of approved suppliers maintained for the use of the Provincial organizations of the Department. Of these 18 are located in the Bengal Presidency, 15 in the Bombay Presidency and 3 in the Province of Sind. The total number of firms registered on local lists in various territories on the 31st March 1938 was as follows :—

Territory	Registered on the list of the Controller of Purchase, Calcutta Circle.	Registered on the list of the Controller of Purchase, Bombay Circle.	Registered on the list of the Controller of Purchase, Karachi Circle.	Total.
Bengal	343	..	..	343
Bombay	..	224	..	224
Sind	..	..	119	119
Madras	19	19	..	19
United Provinces	2	..	..	2
Bangalore (Civil and Military Station)	1	1	..	1
Bangalore (Mysore State) ..	3	3	..	3
Total ..	368	247	119	711

69. *List of firms registered for Important plant, machinery and iron and steel work.*—This list is issued under the provisions of Rule 4 of the " Rules for the supply of articles required to be purchased for the Public Service ". One hundred and seventeen new firms were registered and the names of 47 firms were removed from the list during the year. The total number on the list at the end of the year stood at 1,220. This list, though mainly issued for the information of the purchasing officers of the Central Government, has been adopted by several Local Governments. Copies of the list can be obtained, on payment, from (*i*) The Manager of Publications, Civil Lines, Delhi, (*ii*) The Government of India Book Depot, 8, Hastings Street, Calcutta and (*iii*) The Office of the High Commissioner for India, India House, Aldwych London, W. C. 2.

CHAPTER VIII.

ENCOURAGEMENT OF INDIAN INDUSTRIES, PURCHASES OF INDIGENOUS PRODUCTS AND OTHER ACTIVITIES OF THE DEPARTMENT.

70. *Advice to manufacturers and encouragement to Indian industries.*—The Department continued to take advantage of every opportunity that offered to encourage and assist manufacturers in India in improving the quality of their products by means of technical advice and suggestions in the course of purchase and inspection. Every endeavour was made to substitute supplies of indigenous manufacture, wherever possible, without sacrifice of economy and efficiency. A few notable instances are cited in the following paragraphs :—

(1) *Entomological insect store and postal boxes.*—It was observed from the indents placed on the Director General, India Store Department, London, that these boxes were being obtained from abroad. So as to enable the concerns in India to compete in this line, drawings were prepared of sample boxes obtained from the Indenting Officer and distributed with an enquiry, which was addressed to likely manufacturers, who were asked to submit their quotations and samples in case it was possible for them to manufacture such boxes. The replies disclosed the fact that these boxes could be obtained in India and at prices comparing favourably with those of the imported boxes, and the samples received from the firms together with their quotations were referred to the Indenting Officer for his examination and comments. At first the Indenting Officer did not approve of the quality of the samples due to certain minor defects, but it was pointed out to him that such defects could be easily rectified when arranging supplies and he agreed to place his indents, in future, on the Department. Samples were also forwarded to another indentor and after examination of the boxes, he agreed to draw his supplies in future from concerns in India.

(2) *Point indicator lamps.*—In the scrutiny of tenders received against a demand for this item it was observed that the price quoted by a manufacturer in India was more favourable than that of the importer: The tenders were forwarded to the indentor, who preferred the proprietary imported brand as he had no experience of other makes. After placing an order as indicated by him, the matter was pursued and the Indian manufacturer was asked to send a sample for trial direct to the indenting officer concerned. This has resulted in his approval of the lamps manufactured in India for his future requirements.

(3) *Drill cloth.*—Advice was given to a firm in Bombay during the course of inspection of supplies against an order placed with the firm

by the Department to weave their drill cloth on "tappet" looms instead of "Dobby" looms with the result that a distinct improvement in cover and finish of the cloth was effected.

(4) *Malleable iron castings.*—In the course of inspection, advice was rendered to a local metal works and foundry in respect of the preparation of special moulds and cores, annealing and testing in connection with malleable cast iron vacuum brake and signal components manufactured by them. As a result, their products have attained a high standard and now compare favourably with imported articles, both in quality and finish. The development of this industry has brought about a considerable reduction in the imports of these castings.

(5) *Berth light fittings and side lamps.*—Against tenders invited by the Department for berth light fittings and side lamps a competitive offer was received from a Calcutta firm, but the samples which accompanied the tender were not acceptable as they exhibited a number of defects. These were pointed out to the firm, who were asked to forward fresh counter samples after effecting the necessary improvements. With the assistance rendered by the Department, the firm have now been able to produce side lamps, which have been approved by a State Railway, and a trial order will be placed.

(6) *Locks iron, guard's.*—In view of the difficulties experienced in getting satisfactory supplies of this article, a few selected Aligarh firms were asked to submit samples together with their quotations. With the exception of one firm, whose samples were considered suitable, samples received from others exhibited a number of defects and they were instructed in detail as to the measures to be taken to remove the defects.

Among other articles, to which special attention was devoted during the year, for the purpose of developing their manufacture in India or their utilization in preference to imported articles, the following may be mentioned :—

Anti-waste cocks, scissors, whistles with chains, zinc cells, table knives and regulators for railway carriage fans.

71. *Exhibition of Indian Manufactures.*—The arrangements made in the Imperial Secretariat Buildings, New Delhi, for exhibiting articles of Indian manufacture have already been mentioned in the previous reports. The utility of this exhibition to manufacturers appears to be fully appreciated and during the year exhibits comprising chemicals, oils, paints, varnishes, surgical dressing, glassware, an electric ceiling fan, a steel almirah, a safe, boots and shoes were received from manufcturing concerns in India.

72. *Important purchases of articles of Indian manufacture.*—The Department continued its efforts to substitute, wherever possible, and without

sacrifice of efficiency or economy, articles of indigenous manufacture for imported products. The following is a list of the more important contracts placed during the year for products which were wholly or partially produced or manufactured in India :—

Textiles and Leather Goods.

	Rs.
Tents and tent components	18,22,000
Blankets	16,67,000
Drills	13,11,000
Flannel	11,90,000
Greatcoats and greatcoat cloth	10,06,000
Jackets, cardigan, waistcoat, jerseys, etc.	9,04,000
Socks, stockings, gloves, etc.	8,37,000
Cotton waste	6,40,000
Pugree cloth, dyed and bleached	5,45,000
Serges	5,29,000
Putties, cotton and woollen	4,21,000
Rugs, horse	2,95,000
Drawers, cotton and woollen	2,85,000
Garments, uniform	2,29,000
Dhoti cloth, long cloth and dosuti cloth, etc.	2,18,000
Duck, cotton	1,85,000
Durries	1,85,000
Yarn, cotton and woollen	1,67,000
Paulins, flax, jute and hemp	1,66,000
Ropes, head and heel, loading and picketing, etc.	1,46,000
Cordages, cotton, etc.	1,39,000
Wool, cotton, absorbent	1,33,000
Sheets, barrack and hospital	1,32,000
Cloth, cord	1,30,000
Carpets,	1,23,000
Tape and webbing	1,16,000
Thread, sewing and twine	1,07,000
Bags, postal (flax, jute, leather, etc.)	98,000
Twill, cotton	96,000
Bandage cloth	94,000
Flannelette	86,000
Gauze, absorbent	81,000
Cloth, jaconet, dungree, etc.	77,000
Boots, shoes, etc.	70,000
Covers and nets, tank, mule	68,000
Hessians and gunnies	55,000
Towels and towelling cloth	53,000

Textiles and Leather Goods—concld.

	Rs.
Kanats for aerodrome hangars	51,000
Hides, skins and leather accoutrements	50,000
Nets, mosquito	47,000
Wool, stuffing, packing and trimmings	43,000
Capes, coats and hoods, waterproof	42,000
Caps, cotton, balaclava, etc.	36,000
Dusters, sponge cloths, cloths table, etc.	33,000
Cloth, baize and Oxford	27,000
Cases, pillow, mattresses, etc.	23,000
Cloth, stockinette	20,000
Cloth, collar	17,000
Coir and coir made articles	14,000
Canvas	14,000
Kullahs, lungies and fringes, etc.	10,000
Bunting and flags	10,000
Shirts, blouses, etc.	10,000
Covers, bonnet	10,000

Engineering and Miscellaneous Stores.

Mild steel sections and sheets	44,00,000
Railway permanent way materials and fittings	39,78,000
Cement	20,38,000
Road dressing materials	20,17,000
Cables, conductors, etc.	17,25,000
Steel structures, tanks and stagings	16,41,000
Paints, enamels, varnishes and dry pigments	16,32,000
Component parts for railway carriage underframes and screw couplings	10,26,000
Pipes and specials, cast iron	10,14,000
Lubricating oils and greases	7,30,000
Pig iron	6,46,000
Coal	5,02,000
Aeroplane hangars	4,68,000
Bolts and nuts	3,72,000
Gases	3,47,000
Oil, castor	3,39,000
Anchor plates and rails	3,28,000
Axles, tyres, wheels and underframe parts for locomotives and railway wagons	3,09,000
Charpoys	2,90,000
Fans, electric	2,71,000
Sigalling and interlocking materials	2,65,000
Pipes, Hume	2,38,000

Engineering and Miscellaneous. Stores—contd.

	Rs.
Bricks, fire and fireclay	2,26,000
Lamps, electric	1,98,000
Oil, linseed	1,97,000
Vacuum brake fittings	1,76,000
Creosote	1,58,000
Point rodding	1,42,000
Sheets, asbestos cement and accessories	1,35,000
Insulators	1,22,000
Rubber tyres and tubes	1,19,000
Acids and chemicals	1,13,000
Cells, primary	91,000
Tools, track	88,000
Turpentine and rosin	87,000
Sheets, galvanised iron	78,000
Oil, stand	76,000
Bodies for motor chassis.	63,000
Furniture, steel	61,000
Soaps	57,000
Miscellaneous electrical stores	55,000
Locks	54,000
Pipes, asbestos	53,000
Dust shields	49,000
Oil, kerosene	42,000
Plates, division	34,000
Broadcasting equipment	31,000
Timber	31,000
Weighing machines and weighbridges	28,000
Methylated spirit	28,000
Pig lead	25,000
Cooking ranges and spares	24,000
Roofing materials	23,000
Cylinders, cast iron	23,000
Cranes, lifts and hoists	21,000
Disinfectants	20,000
Petrol	19,000
Scales and weights	19,000
Sea and river craft	18,000
Pipes and specials, stoneware	17,000
Steel, tool	17,000
Letter boxes	17,000
Bars, stretcher	17,000

Engineering and Miscellaneous Stores—concld.

	Rs.
Penstocks	16,000
Fittings, water supply	15,000
Graphite and plumbago..	14,000
Safes and chests	14,000
Sheets, brass	14,000
Tar, crude	14,000
Shellac	14,000
Glass plates, sheets, etc.	13,000
Brushes	12,000
Spares for loco. headlights	11,000
Antimony ingots	10,000
Keys, wooden, babool	10,000

73. *Certification of material for exemption of customs duty.*—The Metallurgical Inspector, Tatanagar, who has been entrusted with the duty of issuing certificates for exemption of Customs duty in regard to certain raw materials used by the Indian Cable Co., Ltd., certified 3,524 tons of copper rods for the manufacture of wires, cables, etc., as against 3,413 tons certified during 1936-37.

CHAPTER IX.

FINANCE.

74. *Statistics of Income and Expenditure.*—A financial statement showing the income and expenditure of the Department for the year 1937-38 and similar information for each of the preceding three years will be found in Appendix XX.

The statement includes, under income, recoveries from Provincial Governments, Commercial Departments and undertakings of the Central Government and non-Government authorities. It also includes a *pro forma* credit, calculated at schedule rates, for work done on behalf of non-commercial civil departments of the Central Government against whom no charges are made.

The figures on the expenditure side of the statement include all direct expenditure as well as items of indirect charges which are usually incorporated in the Profit and Loss accounts of commercial undertakings.

The total income of the Department during the year (including credit for work done but not charged for) amounted to Rs. 20,70,178 against Rs. 16,62,208 for the preceding year, showing an improvement of Rs. 4,07,970. Recoveries on account of purchase and inspection of stores against indents placed with the Department increased by Rs. 3,10,087 and fees earned on stores inspected on behalf of other authorities and on tests and analyses carried out at the Government Test House and the Metallurgical Inspectorate exceeded the corresponding figure of the preceding year by Rs. 91,282. Miscellaneous receipts on account of sale proceeds of tender forms, etc., increased by Rs. 6,601.

The total direct and indirect expenditure for the year 1937-38 amounted to Rs. 26,73,591, exceeding the corresponding figure of the preceding year by Rs. 91,696 only. The increase in expenditure was due to the following causes :—

(*i*) Normal growth of expenditure on account of annual increments, etc.

(*ii*) Employment of additional staff to cope with the large increase in the volume of work handled by the Department, and corresponding increase under stationery, printing and postal charges.

(*iii*) Greater expenditure on inspection of materials in the country of manufacture, as a result of larger purchases.

After covering the excess of Rs. 91,696 on the expenditure side, there was a net improvement of Rs. 3,16,274 in the balance sheet of the Department, as compared with the year 1936-37.

J. S. PITKEATHLY,

Chief Controller of Stores,

Indian Stores Department.

SIMLA ;

Dated the 19th July 1938.

APPENDIX I.

(*Vide* paragraph 9.)

Hints for the guidance of authorities in India desirous of utilising the services of the Indian Stores Department.

Authorities for which the Indian Stores Department is permitted to act.—The Indian Stores Department is authorised to arrange for the purchase and inspection of stores on behalf of all Government Departments, Central as well as Provincial, State and Company Railways, Indian States and *quasi*-public bodies in India. It must be understood, however, that the Department acts merely as an agent in this conection and is not in any way responsible as principal either to the seller or to the buyer.

2. The services of the Department can be utilised for the inspection of stores, orders for which are placed by the consuming authorities direct, and for the testing and analysis of materials at the Government Test House and the Metallurgical Inspectorate, by Government departments, Company Railways, *quasi*-public bodies and Indian States, as well as by private parties.

3. *Classes of stores which can be purchased through the Indian Stores Department.*—The Indian Stores Department undertakes to arrange for the supply of all classes of stores except :—

(1) Foodstuffs and forage.

(2) Lethal stores.

(3) Stationery stores, printing stores and office machinery and appliances as detailed in the Appendix to the Rules for the Supply of Printing and Stationery Stores for the Public Service.

(4) Medical stores.

(5) Mathematical instruments, which under standing orders are to be obtained from the Mathematical Instrument Office.

(6) Scientific instruments and accessories of a special character which involve a departure from standard.

(7) Straw, firewood and charcoal.

(8) Road metal, bricks, stone, marble and similar building materials, lime, sand and chalk.

(9) Indian made wooden and cane furniture, country carts and boats, ordinary packing cases, hand carts, trucks and trolleys which can be satisfactorily and economically obtained from local sources.

4. *Organisation of the Purchase Branch.*—Besides a purchase branch in the Headquarters office, divided into a number of sections dealing with different classes of stores, which will, in future, be located at the Imperial Secretariat Buildings, New Delhi, throughout the year, Provincial Purchase circles are located at Calcutta, Bombay and Karachi. The Postal and Telegraphic addresses of these Circles and their scope of operations are given below :—

Postal Address.	*Telegraphic Address.*	*Territory within which allowed to operate.**
Controller of Purchase, Calcutta Circle, Indian Stores Department, 6, Esplanade East, Calcutta.	Storchase, Calcutta	Bengal, United Provinces, Assam, Bihar, Orissa, Delhi, Madras Presidency (Northern parts), Burma, the Punjab and anywhere in India in the case of indents received from indenting authorities in the Andamans.

*(This has reference to the market in which the order is placed and not to the Headquarters of the indenting officer.)

Postal Address.	*Telegraphic Address.*	*Territory within which allowed to operate.**
Controller of Purchase, Bombay Circle, Indian Stores Department, Central Government Offices Building, Queen's Road, Fort, Bombay.	Storchase, Bombay	Bombay Presidency, the Central Provinces, the Madras Presidency (Southern and Western parts), the Punjab, Delhi and Cawnpore (for textiles only), Calcutta for proprietary articles for the Great Indian Peninsula Railway.
Controller of Purchase, Karachi Circle, Indian Stores Department. 8/5, Civil Lines, Dr. Wrench Road Karachi, Sadar P. O., Karachi.	Storchase, Karachi	Sind, Baluchistan, the Punjab, Delhi and Cawnpore (for textiles only).

5. Indents may be placed with the Provincial Controllers of Purchase at Calcutta, Bombay, and Karachi, up to the limits detailed below except that indents for plant and machinery of a value exceeding Rs. 5,000 should normally be placed on the Headquarters Office.

I. Controller of Purchase, Calcutta Circle.

(1) For jute goods up to Rs. 50,000.

(2) For other stores up to Rs. 15,000.

II. Controller of Purchase, Bombay Circle.

(1) For cotton yarn for the Jail Department, Bombay, up to Rs. 25,000.

(2) For other stores up to Rs. 15,000.

III. Controller of Purchase, Karachi Circle. For all stores up to Rs. 15,000.

Indents exceeding these limits should be placed on the Headquarters Office.

6. *Instructions for the preparation of indents.*—Indents should be submitted on the standard Indian Stores Department Indent form (I. S. D. 28) supplies of which can be obtained on application from the office of the Chief Controller of Stores or from any of the Purchase Circles, at Calcutta, Bombay and Karachi, or inspectorates at Lahore, Cawnpore, Madras and Tatanagar. The items indented for should be described in sufficient detail and any additional information should be given which will assist in the disposal of the indent, *e.g.*, references to catalogues or to previous supplies. The purpose for which stores are required should always be stated and reference to previous supply should be made when duplicates are required.

7. As different classes of stores are dealt with in different sections of the Purchase Branch of the Indian Stores Department, separate indents should, as far as practicable, be prepared for stores of various categories as indicated on the indent form, to facilitate quick disposal of the indents.

8. Indents for the purchase of plant and machinery should provide the fullest information possible and particular care should be taken to see that all peculiar local or special conditions, which might involve departures from normal standards, are mentioned.

9. Indents for spare parts should be compiled from makers' spare parts catalogues where available and care should be taken to quote the correct symbol, number and nomenclature, or code word applicable to the particular type of plant. The maker's number of the machine should also be stated. Failing this, the date and source of original supply should be given. In dealing with demands of this kind drawings are frequently essential.

10. Sufficient time should be allowed to the department for arranging the purchase of stores. Additional expenditure is frequently involved in arranging purchases at short notice.

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*(This has reference to the market in which the order is placed and not to the Headquarters of the indenting officer.)

A specific date should be stated in the indents by which the stores are required, and expressions such as 'immediately' as ', early as possible', or 'urgent' should be avoided. These expressions are constantly used, but they defeat their own object by making it impossible for the Indian Stores Department to differentiate between the degree of urgency of the various indents.

Indenting officers are also requested to spread the demands made on the Indian Stores Department evenly over the whole year as far as possible. The concentration of a large number of orders towards the close of the year not only tends to entail extra expenditure and inconvenience but makes for difficulties in the efficient disposal of the business connected with the purchase and inspection of stores.

11. Indentors should clearly state whether the goods are to be booked by goods or passenger train, whether at 'Owners' or at 'Railway' Risk and whether they are to be insured on rail.

12. It is desirable that wherever possible the Indian Stores Department should be made aware of the approximate amount which the indentor expects to pay for the stores indented for. To this end against each item the last price paid should be entered in the 'estimated cost' column in the indent form. The estimated cost of freight and the Indian Stores Department fees should be added to the total. If information as to the latest price paid is not available a rough estimate should be given.

13. In the event of the quotation which it is proposed to accept being considerably higher than the amount estimated by the indentor, a reference is made to him before the order is actually placed. In the absence of any special instructions on this point, the practice is to refer to the indentor if his estimate of the total cost of the stores demanded in any one indent is likely to be exceeded by 10 per cent. or Rs. 10,000 excepting when the total cost is not more than Rs. 1,000 in which case no reference to the indentor is made.

14. In the case of authorities with whom adjustments are made through the exchange account the appropriate certificate of availability of funds on page 4 of the indent form should be completed on all indents, and in the case of others the treasury receipt or bank deposit receipt must accompany or follow the indents, *vide* paragraph 18.

15. *Disposal of indents.*—The Indian Stores Department holds no stocks of stores of any kind. On receipt of an indent supply is arranged either by placing a separate order for the stores demanded or by combining the demand with others for compliance under a general contract, or, where convenient, under a 'running' or 'rate' contract. Copies of all orders are endorsed to indenting officers and consignees (if other than indenting officers).

16. A list of items for which Rate and Running contracts were entered into during the year 1937-38, is given in Appendix IX. A list of the contracts in force, or copies of those in which an intending indentor may be interested, will be furnished on application. Arrangements can be made to enable Government officers, intending to avail themselves of the facilities, to requisition against such contracts direct from firms.

17. *Adjustment of accounts.*—Debits for the cost of stores purchased through the Indian Stores Department by Government officers and for the departmental fees for purchase (and inspection) levied by the Indian Stores Department, are raised by the Audit Officer, Indian Stores Department, against the Accounts Officer of the consignee in the account of the month in which the suppliers' bills are paid, and exchange accounts shewing all such transactions are sent by the Audit Officer, Indian Stores Department, to the Accounts Officer concerned, in the beginning of the second month after that to which the transactions pertain. Advance intimations of payments are sent to the consignees by the Audit Officer, Indian Stores Department, after a week of the date of payment, to keep the former informed of their liabilities and expenditure, in respect of bills paid direct on certification by Inspectorates or in cases in which amounts passed by consignees are altered in audit, or when payment is made in a financial year subsequent to that in which the bill is passed by the consignee.

18. In the case of authorities against whom book debits cannot be raised, *e.g.*, *quasi*-public bodies and Indian States, the indenting officers have the option either—

(*a*) of placing a sum equivalent to the estimated cost of the stores, plus the departmental fees payable for the services of the Indian Stores Department, to the credit of the Audit Officer, Indian Stores Department, in a Government treasury, forwarding the treasury receipt with the indent ; or

(*b*) of depositing in a branch of the Imperial Bank of India in the name of the Audit Officer, Indian Stores Department, a sum of money sufficient to cover the estimated cost of the stores, plus departmental fees, with instructions to the bank that the sum should be strictly reserved for the purpose of meeting demands from the Audit Officer, Indian Stores Department, which should be complied with by the transfer of the amount to the Government account. The deposit receipt granted by the Bank should be forwarded with the indent.

The latter alternative has been introduced to avoid large sums of money being locked up without interest.

The Government of India have waived the condition of advance deposits in the case of local funds over whose expenditure Government retains complete and direct control.

19. *Inspection, Testing and Chemical Analysis.*—The inspection and testing staff of the Indian Stores Department is located at places noted below :—

Postal Address.	Telegraphic Address.
The Controller of Inspection, Calcutta, Circle, Indian Stores Department, 6, Esplanade East, Calcutta	Storespect, Calcutta.
The Controller of Inspection, Bombay Circle, Indian Stores Department, Central Government Offices Building, Queen's Road, Fort, Bombay	Storespect, Bombay.
The Assistant Controller of Inspection, Karachi Circle, Indian Stores Department, 8/5, Civil Lines, Dr. Wrench Road, Karachi Sadar P.O.. Karachi	Storespect, Karachi.
The Assistant Controller of Inspection, Upper India Circle, Indian Stores Department, 28-A, Empress Road, Lahore	Storespect, Lahore.
The Inspector-in-Charge, Cawnpore Inspection Branch, Indian Stores Department, 254, Nawabganj, Cawnpore	Storespect, Cawnpore.
The Inspector-in-Charge, Madras Branch, Indian Stores Department, Old High Court Buildings, Madras ..	Storespect, Madras.
The Metallurgical Inspector, Indian Stores Department, Burma Mines, Tatanagar	Metalspect, Tatanagar.
The Superintendent, Government Test House, 13, Judge's Court Road, Alipore, Calcutta	Testhouse, Calcutta.

20. These organizations undertake the analyses, tests and investigations of chemicals and other stores, and inspection of materials purchased by the Indian Stores Department or by any other purchasing authorities. Where necessary, inspection in the country of origin is also arranged through the Director General, Indian Stores Department, London. No additional charges are levied by the Department for the cost of such inspection.

21. Requests for inspection of purchases not made through the Indian Stores Department should be addressed to the nearest Inspectorate, or to the Chief Controller of Stores, Indian Stores Department, Inspection Section, on form I. S. D. 40, copies of which can be obtained from him or any Inspectorate, free of charge. Requests for tests or analyses should be addressed to the Superintendent, Government Test House, Alipore, Calcutta, or the Metallurgical Inspector, Tatanagar, as the case may be.

22. *Complaints.*—In the event of serious complaints in regard to quality or price of stores, or delay in supply, full details should be furnished to the Chief Controller of Stores, Indian Stores Department, when they will be carefully investigated. Minor complaints should, however, be referred to the supplying firms direct, and, if necessary, a copy of the complaint endorsed to the inspecting officer concerned in cases where the stores have been inspected by the Indian Stores Department. Complaints regarding adjustment of accounts should be addressed to the Audit Officer, Indian Stores Department, New Delhi. If a matter is not satisfactorily settled, it should be referred to the Chief Controller of Stores.

23. Before making complaints regarding delay in supply, indentors are requested to take into consideration the time required for inspection and for transit from place of supply to destination. Complaints are not uncommon in regard to which this consideration has been entirely overlooked. Similarly before complaining of delay in raising debits, indentors are asked to ensure that the bills have not been delayed by the consignee, it having been found that this is a frequent cause of delay in such cases.

24. All complaints should be made as promptly as possible, as delay may prejudice the chances of obtaining redress, particularly if arbitration or legal proceedings are involved.

25. *Rejections and disposal of rejected stores.*—In the case of orders placed by the Indian Stores Department, this Department is the contracting party, and the final rejection of stores lies within its competence alone. Therefore, it is not possible for an indenting officer or consignee to reject stores which have been accepted by the Department. In cases in which an indenting officer considers that grounds for the rejection of such stores exist a full report should be forwarded immediately to the Indian Stores Department Inspectorate concerned, and the goods complained of should be carefully stored to avoid loss or deterioration, pending investigation by the Department and issue of final instructions as to their disposal. Should it be decided that the stores should be rejected, intimation to this effect will be furnished immediately to the contractor by the Indian Stores Department, and he will be informed that the stores lie at his risk from the date of such rejection and that if not removed within a fortnight of rejection the purchaser will have the right to dispose of the stores as he thinks fit, at the contractor's risk and on his account.

If supplies against an order not exceeding Rs. 5,000 in value are received in a damaged or defective condition and the consignee proposes to accept them at a reduced price to which the supplier is agreeable, he may do so without reference to the Purchase Officer. An intimation of the reduction made should, however, be given to the Purchase and Inspecting Officers concerned for information and record in their books.

If the value of the order exceeds Rs. 5,000, the final decision to assess the reduced price for defective or damaged stores will rest with the Purchase Officer and all such cases should be referred to that officer.

All cases in which the supplier and the consignee are unable to come to an agreement will, of course, be referred to the Purchase Officer, irrespective of the value of the order.

26. Cases occasionally occur in which stores are despatched to their destination after merely a visual examination at the contractor's premises, works or godowns, on the understanding that their final acceptance or rejection shall depend on the results of the tests carried out at the Government Test House. In such cases if the stores are rejected, the contractor will be informed at once, and the stores will lie at the consignee's depot at the contractor's risk from the date of such rejection, and, if not removed within a fortnight of rejection, the consignee will have the right to dispose of them as he thinks fit, at the contractor's risk and on his account.

27. Similarly, stores, which are rejected by the inspecting officer appointed by the Indian Stores Department, after delivery, under the terms of the contract, for inspection at the consignee's depot, will lie at the consignee's depot at the contractor's risk from the date of such rejection, and if not removed within a fortnight of rejection, the consignee will have the right to dispose of them as he thinks fit, at the contractor's risk and on his account

28. Stores rejected in the circumstances indicated above and not removed by the contractor within the period allowed for such removal should be disposed of by the consignee, either by return to the contractor or in such other manner as he considers most uited to the circumstances in each case.

29. The expiry of the period allowed for removal brings into operation the consignee's (Bailee's) right to sell or otherwise dispose of the goods. His liabilities for negligence will, however, continue so long as the goods are in his custody. He cannot, for instance, leave the stores unprotected or in the open exposed to sun and rain, and then disclaim responsibility for loss or damage arising out of such causes. He is expected to exercise such reasonable care of the goods as under the circumstances he would have exercised of his own.

Note.—It should be understood that the foregoing instructions (paragraphs 25 to 29) apply only to stores which are purchased and inspected by the Indian Stores Department.

30. *Departmental fees.*—Under the orders of the Government of India the Indian Stores Department levies a fee of 1 per cent. for purchase and 1 per cent. for inspection on the total cost of orders placed on behalf of all authorities in India except the non-commercial civil departments of the Central Government.

The fee of 1 per cent. for inspection includes all sampling and testing before the contract is concluded and also, where necessary, sampling and testing during the currency of the contract. These charges are adjusted by the Audit Officer, Indian Stores Department, with the cost of stores.

31. The fees for analyses and tests of chemicals and other stores, for inspection of purchases made by other purchasing authorities and for miscellaneous advisory work carried out at the Government Test House, the Metallurgical Inspectorate or any other organization under the Inspection branch of the Department, are given in detail in the schedules prescribed by the Government of India, late Department of Industries and Labour, copies of which can be obtained from the Manager of Publications, Civil Lines, Delhi. Bills for these charges are prepared by the heads of inspection or testing organizations and forwarded to the parties concerned for acceptance and adjustment through exchange account in the case of authorities having exchange accounts and payment in cash, either direct or into the nearest Government treasury, in the case of other authorities and private concerns.

32. No charge is made for services rendered by any branch of the Department (including the Government Test House and the Metallurgical Inspectorate) to non-commercial Civil departments of the Central Government.

APPENDIX II.

Organization of the Indian Stores Department as it stood on the 31st March 1938. (Vide *paragraph 11 of the Report*).

CHIEF CONTROLLER OF STORES.

PURCHASE.

TEXTILES AND LEATHER.
- Deputy Director of Purchase.
- Assistant Director of Purchase.

ENGINEERING AND ELECTRICAL.
- Deputy Director of Purchase.
- Assistant Director of Purchase (Held in abeyance).
- Assistant Controller of Purchase.
- Assistant Controller of Purchase (Leave reserve).

HARDWARE AND MISCELLANEOUS.
- Deputy Director of Purchase.
- Deputy Director of Purchase (Temporary).
- Assistant Director of Purchase.
- Assistant Controller of Purchase (Leave reserve).

PROVINCIAL.

CALCUTTA.
- Controller of Purchase.
- 2 Assistant Controllers of Purchase.
  - Head Clerk.
  - Stenographer.
  - 34 Clerks.
  - 3 Duftries.
  - 13 Peons.
  - Chowkidar.

BOMBAY.
- Controller of Purchase.
  - Head Clerk.
  - Stenographer.
  - 19 Clerks.
  - Duftry
  - 8 Peons.

KARACHI.
- Controller of Purchase.
  - Head Clerk.
  - Stenographer.
  - 16 Clerks.
  - Duftry.
  - 7 Peons.
  - Chowkidar.

ADMINISTRATION AND INTELLIGENCE.

- Deputy Director of Administration and Intelligence.
- Assistant Director of Administration and Intelligence.
  - 6 Superintendents.
  - 162 Assistants and Clerks.
  - 5 Stenographers.
  - 5 Record sorters.
  - 16 Duftries.
  - Jemadar.
  - 2 Duffadars.
  - 41 Peons.
  - 4 Farashes.

INSPECTION.

- Deputy Director of Inspection.
- Assistant Director of Inspection.
- 2 Assistant Engineers (Inspection).
  - 1 Examiner.
  - Head Draftsman.
  - 6 Draftsmen.
  - Ferro-typer.
  - 2 Spongemen.

PROVINCIAL.

CALCUTTA INSPECTION CIRCLE.
- Controller of Inspection.
- 2 Assistant Controllers of Inspection.
- 16 Assistant Engineers (Inspection) and Inspectors of Stores.
- Assistant Controller of Administration, Calcutta Purchase and Inspection Circles.
  - 19 Examiners.
  - Head Clerk.
  - Stenographer.
  - 50 Clerks.
  - Draftsman.
  - 4 Duftries.
  - 19 Peons.
  - Chowkidar.

GOVERNMENT TEST HOUSE, ALIPORE.
- Superintendent, Government Test House.
  - Physicist.
    - Assistant Engineer
    - 10 Physical Assistants.
    - Foreman.
  - Personal Assistant to the Superintendent.
    - Head Clerk.
    - Stenographer.
    - Accountant.
    - 15 Clerks.
    - 2 Storekeepers.
    - 3 Laboratory operators.
    - 8 Mistries.
    - 3 Fitters.
    - 14 Laboratory bearers.
    - 15 Laboratory Khalasis.
    - 2 Duftries.
    - 11 Peons
    - Chowkidar
    - Mali.
    - Farash.
  - Chemist.
    - Assistant Chemist.
    - 20 Chemical Assistants.
  - Research Branch.
    - Research Officer.
    - Assistant Research Officer.
    - 8 Chemical Assistants.
    - 7 Physical Assistants.
    - 5 Clerks.
    - Draftsman.
    - Instrument Maker.
    - 4 Mistries.
    - 6 Laboratory bearers.
    - 3 Peons.
    - 2 Khalasis.

METALLURGICAL INSPECTORATE.
- Metallurgical Inspector.
- 2 Assistant Metallurgical Inspectors.
  - Physical.
    - 4 Assistant Engineers (Inspection).
    - 7 Examiners.
  - Head Clerk.
  - Accountant.
  - Stenographer.
  - 13 Clerks.
  - 2 Mistries.
  - Head Laboratory Bearer.
  - 2 Laboratory Bearers.
  - Head Peon.
  - 7 Peons.
  - Mali.
  - Chemical
    - 5 Chemical Assistants.

MADRAS INSPECTION BRANCH.
- Inspector-in-charge.
  - 4 Clerks.
  - Duftry.
  - 3 Peons.

BOMBAY INSPECTION CIRCLE.
- Controller of Inspection.
- 6 Assistant Engineers (Inspection) and Inspector of Stores.
- Personal Assistant to the Controller of Inspection.
  - 9 Examiners.
  - Head Clerk.
  - Stenographer.
  - 23 Clerks.
  - Draftsman.
  - Laboratory Bearer.
  - 2 Duftries.
  - 10 Peons.
  - Chowkidar.
  - Farash.

UPPER INDIA INSPECTION CIRCLE.
- Assistant Controller of Inspection.
- Assistant Engineer (Inspection).
  - 2 Examiners.
  - Head Clerk.
  - Stenographer.
  - 7 Clerks.
  - Duftry.
  - 5 Peons.

CAWNPORE INSPECTION BRANCH.
- Inspector-in-charge.
  - 3 Examiners.
  - 6 Clerks.
  - Duftry.
  - 4 Peons.
  - Chowkidar.

KARACHI INSPECTION CIRCLE.
- Assistant Controller of Inspection.
  - 4 Examiners.
  - Head Clerk.
  - Stenographer.
  - 12 Clerks.
  - Duftry.
  - 7 Peons.
  - Mali.

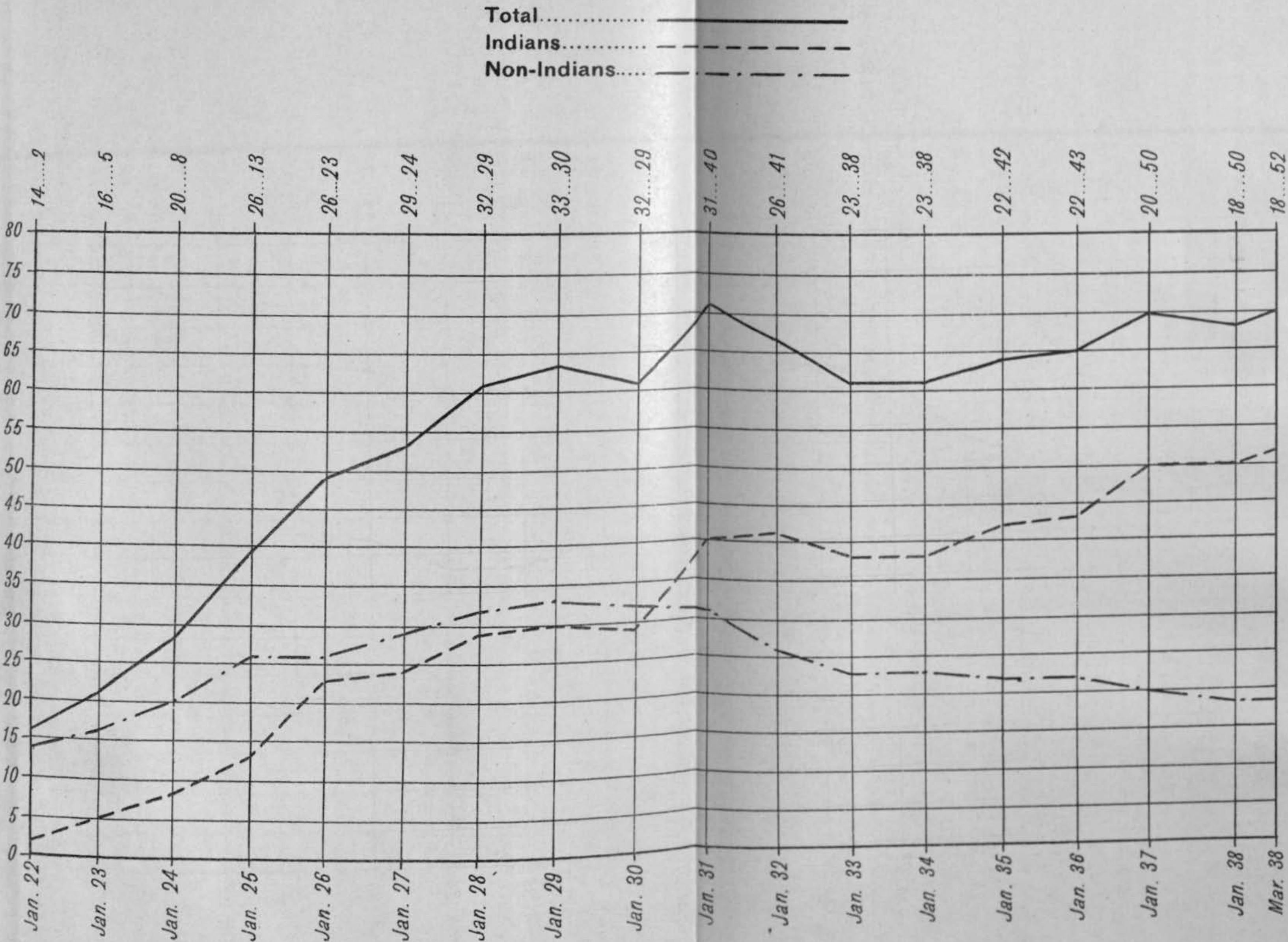
INDUSTRIAL RESEARCH BUREAU.

- Director.
- Assistant Director.
  - Superintendent.
  - 2 Technical Assistants.
  - Librarian.
  - 13 Assistants and Clerks.
  - 2 Stenographers.
  - Draftsman.
  - Tracer.
  - Record Sorter.
  - 2 Duftries.
  - Daffadar.
  - 5 Peons
  - Farash.

Appointments held in abeyance under the orders of the Government of India but not formally abolished have been excluded.

APPENDIX - III.

INDIAN STORES DEPARTMENT.
GAZETTED STAFF UP TO 31st. MARCH 1938.
(Vide paragraph 13 of the Report.)



Survey Section No 95 July 1938—520.

APPENDIX IV.

Statement showing details of the communal composition of the staff employed in the Indian Stores Department.

(*Vide* paragraph 16 of the Report.)

Direct recruitment during 1937. (Departmental promotions not included.)

Particulars.	Hindus.	Mohammadans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
Gazetted Staff.									
Chief Controller of Stores	..	..	..	..	..	..	..	..	..
Administration and Intelligence Branch.	..	..	..	..	..	..	..	..	..
Purchase Branch	..	..	..	..	..	..	..	..	..
Inspection Branch	..	..	..	..	..	..	..	1	1
Industrial Research Bureau ..	..	..	..	..	..	..	..	..	..
Total ..	..	..	..	..	..	..	..	1	1
Subordinate Technical Staff.									
(1) Examiner of Stores	..	..	1	..	..	..	1	..	1
(2) Chemical Assistants	1	..	..	..	..	..	1	..	1
(3) Physical Assistants	..	..	..	..		1	1	..	1
(4) Drawing Office Staff	1	1	..	..	..	..	2	..	2
(5) Other technical staff (Technical Assistants, Laboratory fitters, etc.)	6	1	..	..	..	..	7	..	7
Total ..	8	2	1	..	..	1	12	..	12
Clerical Staff.									
Headquarters	19	7	3	..	..	..	29	..	29
Subordinate Offices	9	7	1	1	..	..	18	..	18
Total ..	28	14	4	1	..	..	47	..	47
GRAND TOTAL ..	36	16	5	1	..	1	59	1	60

Total on 1st January 1938.

Particulars.	Hindus.	Mohammadans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
Gazetted Staff.									
Chief Controller of Stores	..	..	..	..	..	..	..	1	1
Administration and Intelligence Branch.	2	..	..	..	..	..	2	..	2
Purchase Branch	9	1	..	1	..	..	11	3	14
Inspection Branch	25	5	1	1	3	1	36	12	48
Industrial Research Bureau ..	1	..	..	..	..	..	1	2	3
Total ..	37	6	1	2	3	1	50	18	68
Subordinate Technical Staff.									
(1) Examiner of Stores	31	6	4	2	1	..	44	..	44
(2) Chemical Assistants	26	4	..	..	..	..	30	..	30
(3) Physical Assistants	14	1	..	..	..	1	16	..	16
(4) Drawing Office Staff	7	4	1	..	..	..	12	..	12
(5) Other technical staff (Technical Assistants, Laboratory fitters, etc.)	18	3	..	1	..	1	23	..	23
Total ..	96	18	5	3	1	2	125	..	125
Clerical Staff.									
Headquarters	133	34	13	2	2	..	184	..	184
Subordinate Offices	156	43	6	15	1	1	222	..	222
Total ..	289	77	19	17	3	1	406	..	406
GRAND TOTAL ..	422	101	25	22	7	4	581	18	599

Total on 1st January 1937.

Particulars.	Hindus.	Mohammadans.	Sikhs.	Indian Christians.	Anglo-Indians.	Other Indian communities.	Total Indians.	Europeans.	Total.
Gazetted Staff.									
Chief Controller of Stores	..	..	..	..	..	..	..	1	1
Administration and Intelligence Branch.	1	..	..	1	..	..	2	..	2
Purchase Branch	9	1	..	1	..	..	11	3	14
Inspection Branch	25	5	1	1	2	1	35	14	49
Industrial Research Bureau ..	2	..	..	..	..	..	2	2	4
Total ..	37	6	1	3	2	1	50	20	70
Subordinate Technical Staff.									
(1) Examiner of Stores	31	6	4	2	1	..	44	..	44
(2) Chemical Assistants	41	5	..	..	..	..	46	..	46
(3) Physical Assistants									
(4) Drawing Office Staff	6	4	1	..	..	..	11	..	11
(5) Other technical staff (Technical Assistants, Laboratory fitters, etc.)	15	3	..	1	..	1	20	..	20
Total ..	93	18	5	3	1	1	121	..	121
Clerical Staff.									
Headquarters	123	33	12	2	3	..	173	..	173
Subordinate Offices	154	41	5	15	1	1	217	..	217
Total ..	277	74	17	17	4	1	390	..	390
GRAND TOTAL ..	407	98	23	23	7	3	561	20	581

APPENDIX V.

Value of stores purchased. (Vide *paragraphs 2 and 17 of the Report.*)

—	Year.	Calcutta.	Bombay.	Karachi.	Total Provincial Circles.	Headquarters.	Grand Total.
Textiles	1934-35	6,92,390	2,34,489	24,326	9,51,205	86,34,152	95,85,357
	1935-36	6,38,379	2,21,537	22,178	8,82,094	90,40,150	99,22,244
	1936-37	5,46,802	2,29,793	50,882	8,27,477	1,06,84,652	1,15,12,129
	1937-38	5,91,813	2,60,046	54,605	9,06,464	1,49,06,680	1,58,13,144
Engineering and Miscellaneous stores	1934-35	43,14,777	12,63,019	10,81,268	66,59,064	3,13,91,830	3,80,50,894
	1935-36	44,76,595	14,37,468	16,25,100	75,39,163	3,84,43,459	4,59,82,622
	1936-37	38,30,912	14,07,417	11,59,995	63,98,324	4,69,96,081	5,33,94,405
	1937-38	57,35,428	16,47,646	14,17,790	88,00,864	5,43,17,370	6,31,18,234
Total	1934-35	50,07,167	14,97,508	11,05,594	76,10,269	4,00,25,982	4,76,36,251
	1935-36	51,14,974	16,59,005	16,47,278	84,21,257	4,74,83,609	5,59,04,866
	1936-37	43,77,714	16,37,210	12,10,877	72,25,801	5,76,80,733	6,49,06,534
	1937-38	63,27,241	19,07,692	14,72,395	97,07,328	6,92,24,050	7,89,31,378

APPENDIX VI.

Statement showing the value of stores purchased on behalf of various authorities utilizing the services of the Indian Stores Department during the year 1937-38 and three preceding years. (Vide *paragraphs 2 and 17 of the Report.*)

Serial No.	Organization.	Purchases made during 1937-38.			Total for the year		
		Textiles and Leather.	Engineering, hardware and mis-cellaneous stores.	Total for 1937-38.	1936-37.	1935-36.	1934-35.
	Central—Defence.						
1	Quartermaster-General in India (including Mechanical Transport).	..	20,79,302	20,79,302	7,68,812	7,53,155	5,33,514
2	Master General of the Ordnance ..	1,08,79,913	1,04,645	1,09,84,558	64,85,721	47,24,036	51,05,284
3	Military Engineer Services	26,041	45,59,690	45,85,731	38,66,952	42,70,216	22,86,298
4	Royal Indian Navy ..	1,11,338	4,03,580	5,14,918	4,69,250	3,92,913	4,37,662
5	Royal Air Force ..	64,881	4,88,728	5,53,609	1,03,238	72,578	35,496
6	Other Military Authorities	1,73,216	6,884	1,80,100	2,57,398	1,53,867	2,08,451
	Total—Central Defence	1,12,55,389	76,42,829	1,88,98,218	1,19,51,371	1,03,66,765	86,06,705
	Central—Civil. (including minor Administrations).						
7	Government of India Secretariat and attached offices ..	46,966	15,057	62,023	1,25,685	1,01,686	68,757
8	Superintendent, Viceregal Estates ..	3,044	44,924	47,968	34,388	26,940	19,580
	Authorities subordinate to the Department of Communications.						
9	Indian Posts and Telegraphs Department	4,17,983	32,72,939	36,90,922	21,53,199	46,99,180	29,15,106
10	Civil Aviation Department	4,247	1,95,266	1,99,513	1,58,971	19,70,350	72,643
11	Other Authorities ..	1,395	4,97,441	4,98,836	Included under other authorities—Labour Department.		
	Total—Authorities subordinate to the Department of Communications ..	4,23,625	39,65,646	43,89,271	23,12,170	66,69,530	29,87,749

Serial No.	Organization.	Purchases made during 1937-38.			Total for the year		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	1936-37.	1935-36.	1934-35.
	Authorities subordinate to the Labour Department.						
12	Printing and Stationery Department (India)	79,665	24,755	1,04,420	66,056	72,382	88,054
13	Central Public Works Department ..	12,379	6,44,541	6,56,920	11,89,646	4,00,584	9,95,748
14	Other authorities ..	2,343	3,499	5,842	10,98,006	48,483	40,505
	Total—Authorities subordinate to the Department of Labour.	94,387	6,72,795	7,67,182	23,53,708	5,21,449	11,24,307
15	Authorities subordinate to the Commerce Department..	3,631	2,08,178	2,11,809	3,48,889	1,77,164	2,91,176
	Authorities subordinate to the Finance Department.						
16	Northern India Central Excises and Salt ..	8,085	1,69,878	1,77,963	2,61,615	1,55,136	1,84,527
17	Other authorities ..	34,886	2,63,568	2,98,454	2,17,484	1,27,986	1,13,678
	Total—Authorities subordinate to the Finance Department..	42,971	4,33,446	4,76,417	4,79,099	2,83,122	2,98,205
	Authorities subordinate t the Department of Education, Health and Lands.						
18	Survey of India ..	47,767	21,662	69,429	57,990	50,893	43,334
19	Director General, Indian Medical Service	463	10,430	10,893	2,913	1,105	914
20	Other authorities ..	11,595	1,74,335	1,85,930	1,73,677	1,22,758	1,51,368
	Total—Authorities subordinate to the Department of Education, Health and Lands	59,825	2,06,427	2,66,252	2,34,580	1,74,756	1,74,756

Serial No.	Organization.	Purchases made during 1937-38.			Total for the year		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	1936-37.	1935-36.	1934-35.
21	Authorities subordinate to Political Department ..	1,61,480	13,406	1,74,886	1,22,945	1,50,620	2,03,710
22	Authorities subordinate to External Affairs Department.	24,255	62,829	87,084	*	*	*
	Minor Local Administrations.						
23	Baluchistan Administration	52,393	65,232	1,17,625	2,10,790	4,42,431	73,008
24	Coorg Administration	4,089	21,512	25,601	15,179	16,475	3,432
25	Ajmer-Merwara Administration ..	16,431	8,094	24,525	18,495	18,459	31,642
26	Delhi Administration	8,682	1,41,236	1,49,918	66,209	1,68,894	19,499
27	Andaman Commission	30,935	3,52,814	3,83,749	3,96,193	3,23,102	3,80,209
	Total—Minor Local Administrations ..	1,12,530	5,88,888	7,01,418	7,06,866	9,69,361	5,07,790
	Total—Central—Civil	9,72,714	62,11,596	71,84,310	67,18,330	90,74,628	56,96,890
	Railways—State-managed.						
28	North Western Railway	9,07,362	1,30,54,778	1,39,62,140	1,08,57,305	89,61,863	64,47,103
29	Eastern Bengal Railway	2,03,121	45,76,217	47,79,338	45,98,108	39,48,693	48,09,919
30	East Indian Railway	6,93,760	1,24,57,264	1,31,51,024	1,12,28,855	92,73,474	88,58,346
31	Great Indian Peninsula Railway ..	4,26,615	60,34,013	64,60,628	59,87,221	51,97,571	48,28,803
32	Central Publicity Bureau (Indian State Railways) ..	..	9,001	9,001	5,043	5,200	3,759
33	Railway Clearing Accounts Office ..	..	413	413	251	66	431
34	Chief Mining Engineer, Railway Board ..	3,972	5,47,639	5,51,611	97,198	..	..
35	Burma Railways ..	Included und	er British and Governments.	Colonial	2,72,927	4,23,957	4,02,231
	Total—State-managed Railways ..	22,34,830	3,66,79,325	3,89,14,155	3,30,46,908	2,78,10,824	2,53,50,592

* Included in Political Department.

Serial No.	Organization.	Purchases made during 1937-38. Textiles and Leather.	Engineering, Hardware and miscellaneous stores.	Total for 1937-38.	Total for the year. 1936-37.	1935-36.	1934-35.
	Railways—Company-managed.						
36	Assam-Bengal Railway	18,697	1,09,942	1,28,639	92,402	91,412	87,253
37	Bombay, Baroda and Central India Railway	..	..	..	2,96,903	..	..
38	South Indian Railway	61,511	2,31,331	2,92,842	2,73,820	3,05,984	2,58,909
39	Bengal Nagpur Railway	102	43,729	43,831	17,69,960	42,613	42,637
40	Madras and Southern Mahratta Railway..	2,271	3,03,664	3,05,935	3,98,465	2,36,197	2,26,537
41	Bengal and North-Western Railway ..	..	169	169	..	..	..
42	Bankura Damodar Railway	..	..	..	..	..	9
43	Darjeeling Himalayan Railway	..	..	..	1,627	..	..
44	Rohilkund and Kumaon Railway ..	..	..	..	275	..	..
	Total—Company-managed Railways ..	82,581	6,88,835	7,71,416	28,33,452	6,76,206	6,15,345
	Railways—managed by Indian States.						
45	Jodhpur Railway ..	613	10,94,076	10,94,689	2,08,427	4,13,398	4,68,039
46	H. E. H. the Nizam's State Railway ..	28,939	39,627	68,566	73,517	1,14,296	63,860
47	Baroda State Railway	..	..	..	—36	6,720	..
48	Mysore Railways ..	..	996	996	252	..	..
	Total—Railways managed by Indian States	29,552	11,34,699	11,64,251	2,82,160	5,34,414	5,31,899
	Grand Total Railways	23,46,963	3,85,02,859	4,08,49,822	3,61,62,520	2,90,21,444	2,64,97,836

Serial No.	Organization.	Purchases made during 1937-38.			Total for the year		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	1936-37.	1935-36.	1934-35.
	PROVINCIAL.						
	Madras.						
49	Public Works Department	1,277	7,11,953	7,13,230	8,79,645	11,55,091	4,03,851
50	Police Department ..	84,587	17,920	1,02,507	92,109	74,982	79,733
51	Jail Department ..	12,501	25,293	37,794	76,993	51,175	52,064
52	Other Departments ..	1,14,143	75,428	1,89,571	1,48,298	76,608	84,470
	Total—Madras ..	2,12,508	8,30,594	10,43,102	11,97,045	13,57,856	6,20,118
	Bombay.						
53	Public Works Department	659	5,56,474	5,57,133	3,27,936	8,17,507	6,98,686
54	Police Department ..	1,07,663	2,727	1,10,390	2,06,970	1,83,285	1,93,069
55	Jail Department ..	49,672	2,862	52,534	23,674	36,538	19,020
56	Other Departments ..	24,438	29,499	53,937	41,215	47,589	55,126
	Total—Bombay	1,82,432	5,91,562	7,73,994	5,99,795	10,84,919	9,65,901
	Bengal.						
57	Public Works Department	..	1,54,042	1,54,042	1,64,045	83,462	50,228
58	Police Department ..	583	784	1,367	1,805	16,305	2,660
59	Jail Department ..	46,044	1,527	47,571	62,674	93,279	73,010
60	Other Departments ..	76,567	37,712	1,14,279	1,19,371	50,374	35,857
	Total—Bengal	1,23,194	1,94,065	3,17,259	3,47,895	2,43,420	1,61,755
	United Provinces.						
61	Public Works Department	..	1,53,336	1,53,336	69,053	45,206	1,19,348
62	Other Departments ..	..	13,837	13,837	6,537	17,207	16,455
	Total—United Provinces ..	..	1,67,173	1,67,173	75,590	62,413	1.35.803
	Punjab.						
63	Public Works Department	10,051	31,08,595	31,18,646	21,61,569	18,50,112	20,30,372
64	Other Departments ..	1,42,262	1,84,207	3,26,469	3,84,384	3,59,684	2,50,186
	Total—Punjab ..	1,52,313	32,92,802	34,45,115	25,45,953	22,09,796	22,80,558

Serial No.	Organization.	Purchases made during 1937-38. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	Total for the year 1936-37.	1935-36.	1934-35.
	Bihar.						
65	Public Works Department	361	1,68,322	1,68,683	2,16,180	2,61,359	1,12,240
66	Other Departments ..	3,828	26,780	30,608	35,302	32,360	65,576
	Total—Bihar ..	4,189	1,95,102	1,99,291	2,51,482	2,93,719	1,77,816
	Central Provinces.						
67	Public Works Department	79	3,61,650	3.61,729	5,28,297	2,61,678	1,67,944
68	Other Departments ..	17,520	18,060	35,580	43,037	34,338	15,616
	Total Central Provinces	17,599	3,79,710	3,97,309	5,71,334	2,96,016	1,83,560
	Assam.						
69	Public Works Department	2,191	9,366	11,557	7,663	6,283	3,956
70	Police Department ..	1,29,635	1,764	1,31,399	95,816	94,358	83,479
71	Jail Department ..	3,467	290	3,757	6,384	17,990	11,733
72	Other Departments ..	3,426	6,773	10,199	6,836	7,247	4,632
	Total—Assam ..	1,38,719	18,193	1,56,912	1,16,699	1,25,878	1,03,800
73	North-West Frontier Province	1,19,537	7,10,851	8,30,388	6,14,301	4,98,650	4,61,975
	Burma.						
74	Public Works Department	Included under British and Colonial Governments.			2,264	6,253	12,957
75	Police Department ..				1,33,277	1,63,886	1,09,673
76	Jail Department ..				6,080	8,241	3,839
77	Other Departments ..				1,805	443	27
	Total—Burma ..	..	..	..	1,43,426	1,78,823	1,26,496

Serial No.	Organization.	Purchases made during 1937-38. Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	Total for the year 1936-37.	1935-36.	1934-35.
	Orissa.						
78	Public Works Department	148	80,173	80,321	44,784	*	*
79	Other Departments ..	448	4,967	5,415	4,434	*	*
	Total—Orissa ..	596	85,140	85,736	49,218	*	*
	Sind.						
80	Public Works Department	6,588	6,60,574	6,67,162	4,44,689	†	†
81	Other Departments ..	82,413	43,390	1,25,803	83,933	†	†
	Total—Sind ..	89,001	7,03,964	7,92,965	5,28,622	†	†
	Total-Provincial ..	10,40,088	71,69,156	82,09,244	70,41,360	63,51,490	52,17,782
	Indian States.						
82	Jaipur	..	1,05,800	1,05,800	2,85,559	64,549	1,99,809
83	Mysore	..	..	..	17	..	..
84	Bahawalpore ..	..	1,51,264	1,51,264	70,406	1,10,780	1,39,646
85	Hyderabad ..	..	5,033	5,033	3,516	3,222	2,913
86	Jamkhandi ..	..	..	..	..	..	164
87	Indore	..	1,977	1,977	..	2,571	7,723
88	Gwalior	48	4,811	4,859	6,473	6,132	3,357
89	Patiala	..	51,859	51,859	25,193	59,223	159
90	Jodhpur	..	54,452	54.452	66,115	79,978	46,045
91	Khairpur	645	61,369	62,014	42,181	31,997	27,023
92	Jind	10	..	10	..	..	..
93	Sikkim	..	279	279	763	..	..
94	Barwani	..	..	..	..	..	33
95	Junagadh	..	..	..	..	..	6,598
96	Bharatpur	6,013	..	6,013	328	..	533

* Included in Bihar.

† Included in Bom

Serial No.	Organization.	Purchases made during 1937-38. Textiles and Leather.	Engineering. hardware and miscellaneous stores.	Total for 1937-38.	Total for the year 1936-37.	1935-36.	1934-35.
	Indian States—contd.						
97	Nabha	10	64,052	64,062	..	..	84
98	Gangpur	..	..	..	..	..	143
99	Sundergarh	..	..	..	..	..	90
100	Alwar	..	..	..	372	..	997
101	Bahawalnagar ..	..	2,926	2,926	249	674	..
102	Chatarpur	396	..	396	1,243	2,634	..
103	Darbhanga ..	..	..	..	..	351	..
104	Baroda	..	..	..	..	47	..
105	Cooch Behar ..	..	5,129	5,129	2,604	1,874	..
106	Mudhol	..	..	..	..	260	..
107	Tonk	..	2,093	2,093	355	..	..
108	Mandi	..	..	..	15	..	..
109	Ramdurg	..	..	..	124	..	..
110	Bundi	..	2,900	2,900	9,530	..	..
111	Cochin	..	..	..	425	..	..
112	Bhopal	..	39,084	39,084	4,654	..	..
113	Mewar	..	12,533	12,533	..	..	..
114	Travancore ..	..	..	..	50,733	..	..
115	Tehri Garhwal ..	..	3,560	3,560	..	..	..
116	Bhavnagar ..	..	1,974	1,974	..	..	..
117	Bhagal	606	..	606	..	..	..
118	Kapurthala ..	..	993	993	..	..	..
	Total—Indian States	7,728	5,72,088	5,79,816	5,70,855	3,64,292	4,35,317
	Quasi-Public bodies.						
119	City Board, Mussoorie	..	70,236	70,236	2,01,173	20,322	1,11,302
120	Municipal Committee, Simla	53	31,781	31,834	25,683	15,638	17,471
121	Municipal Committee, New Delhi ..	537	5,25,427	5,25,964	9,91,862	2,48,485	2,78,930
122	Municipal Corporation, Karachi	..	3,48,142	3,48,142	16,018	40,190	3,86,038
123	Municipal Corporation, Madras	..	56,136	56,136	51,467	32,294	59,641
124	Other Municipalities and District Boards	2,238	4,69,208	4,71,446	4,13,021	2,85,394	1,97,342

Serial No.	Organization.	Purchases made during 1937-38.			Total for the year		
		Textiles and Leather.	Engineering, hardware and miscellaneous stores.	Total for 1937-38.	1936-37.	1935-36.	1934-35.
125	Port Commissioners ..	6,630	12,94,986	13,01,616	17,926	29,580	19,602
126	Joint Water Board, Delhi	544	15,157	15,701	10,756	29,821	84,205
127	Other Local Bodies ..	6,027	98,185	1,04,212	7,23,719	13,998	12,466
	Total—*Quasi*-Public Bodies	16,029	29,09,258	29,25,287	24,51,625	7,15,722	11,66,997
	British and Colonial Governments.						
	Burma.						
128	Public Works Department	..	3,370	3,370	..	..	..
129	Police Department ..	1,28,024	13,225	1,41,249	..	..	..
130	Jail Department ..	32,866	363	33,229	Included under Provincial Governments.		
131	Other Departments ..	50	15,907	15,957	..	..	..
132	Burma Railways ..	7,781	69,022	76,803	Included under State Railways.		
	Total—Burma ..	1,68,721	1,01,887	2,70,608	..	..	..
133	Royal Airship Base, Karachi	..	5,032	5,032	2,966	4,596	937
134	Singapore Straits Settlements ..	2,383	5	2,388	2,951	3,326	10,644
135	Ceylon Government ..	..	3,524	3,524	3,026	2,603	3,143
136	Union of South Africa	..	..	..	1,530	..	..
37	Aden	3,129	..	3,129	..	..	..
	Total—British and Colonial Governments	1,74,233	1,10,448	2,84,681	10,473	10,525	14,724
	Abstract.						
	Central—Defence ..	1,12,55,389	76,42,829	1,88,98,218	1,19,51,371	1,03,66,765	86,06,705
	Central—Civil ..	9,72,714	62,11,596	71,84,310	67,18,330	90,74,628	56,96,890
	Railways—State-managed	22,34,830	3,66,79,325	3,89,14,155	3,30,46,908	2,78,10,824	2,53,50,592
	Railways—Company-managed	82,581	6,88,835	7,71,416	28,33,452	6,76,206	6,15,345
	Railways—Managed by Indian States ..	29,552	11,34,699	11,64,251	2,82,160	5,34,414	5,31,899
	Total—Railways ..	23,46,963	3,85,02,859	4,08,49,822	3,61,62,520	2,90,21,444	2,64,97,836
	Provincial Governments	10,40,088	71,69,156	82,09,244	70,41,360	63,51,490	52,17,782
	Indian States ..	7,728	5,72,088	5,79,816	5,70,855	3,64,292	4,35,317
	Quasi-Public Bodies ..	16,029	29,09,258	29,25,287	24,51,625	7,15,722	11,66,997
	British and Colonial Governments ..	1,74,233	1,10,448	2,84,681	10,473	10,525	14,724
	Grand Total ..	1,58,13,144	6,31,18,234	7,89 31,378	6,49,06,534	5,59,04,866	4,76,36,251

APPENDIX VII.

Statement showing the value of various classes of purchases (indigenous and imported) during 1937-38 and three preceding years. (Vide *paragraphs 2 and 17 of the Report.*)

Class of stores.	1937-38.		1936-37.		1935-36.		1934-35.	
	Total	Percentage.	Total.	Percentage.	Total.	Percentage.	Total.	Percentage.
I.—TEXTILES AND LEATHER.								
(a) Stores purchased in the Indian market.								
(i) Cotton—								
Indigenous ..	69,41,137	98·7	53,63,840	98·7	46,75,035	97·5	38,23,069	97·0
Imported ..	90,657	1·3	71,563	1·3	1,22,528	2·5	1,19,200	3·0
(ii) Woollen—								
Indigenous ..	71,88,881	99·6	41,36,147	99·5	35,13,112	98·7	25,93,472	98·7
Imported ..	29,421	·4	22,686	·5	45,368	1·3	36,187	1·3
(iii) Jute, hemp, etc.								
Indigenous ..	7,01,243	68·1	9,21,557	74·1	7,92,773	71·4	12,58,447	79·7
Imported ..	3,28,328	31·9	3,22,269	25·9	3,17,399	28·6	3,20,208	20·3
(iv) Leather—								
Indigenous ..	1,75,630	88·7	1,88,225	80·9	1,58,256	79·7	1,93,281	94·3
Imported ..	22,338	11·3	44,581	19·1	40,419	20·3	11,604	5·7
Total—Indigenous	1,50,06,891	97·0	1,06,09,769	95·8	91,39,176	94·6	78,68,269	94·2
Imported	4,70,744	3·0	4,61,099	4·2	5,25,714	5·4	4,87,199	5·8
Total—Stores purchased in the Indian market.	1,54,77,635	..	1,10,70,868	..	96,64,890	..	83,55,468	..
(b) Stores purchased from Government Departments or Depots—Indigenous.								
Cotton ..	3,619	..	2,439	..	17,933	..	12,940	..
Woollen ..	1,26,368	..	46,325	..	327	..	1,24,950	..
Jute, hemp, etc.	1,021	..	642	..	8,239	..	199	..
Total ..	1,31,008	..	49,406	..	26,499	..	1,38,089	..
(c) Stores purchased direct from outside India—Imported.								
Cotton ..	..	..	..	..	891	..	1,36,407	..
Woollen ..	2,04,501	..	3,91,855	..	1,69,792	..	6,34,244	..
Jute, hemp, etc.	..	..	..	..	60,172	..	3,21,149	..
Total ..	2,04,501	..	3,91,855	..	2,30,855	..	10,91,800	..
Total—Indigenous	1,51,37,899	95·73	1,06,59,175	92·6	91,65,675	92·4	80,06,358	83·5
Imported	6,75,245	4·27	8,52,954	7·4	7,56,569	7·6	15,78,999	16·5
Total - Textiles and Leather.	1,58,13,144	..	1,15,12,129	..	99,22,244	..	95,85,357	..
II.—ENGINEERING AND MISCELLANEOUS STORES.								
(a) Stores purchased in the Indian market ..	6,30,05,187	..	5,31,82,769	..	4,59,36,832	..	3,79,17,875	..
(b) Stores purchased from Government Departments or Depots ..	365	..	510	..	10,982	..	7,481	..
(c) Stores purchased direct from outside India ..	1,12,682	..	2,11,126	..	34,808	..	1,25,538	..
Total—Engineering and Miscellaneous Stores ..	6,31,18,234	..	5,33,94,405	..	4,59,82,622	..	3,80,50,894	..
GRAND TOTAL ..	7,89,31,378	..	6,49,06,534	..	5,59,04,866	..	4,76,36,251	..

APPENDIX VIII.

Value in rupees of stores purchased in each province during the year 1937-38, and three preceding years. (Vide *paragraphs 2, 17 and 29 of the Report.*)

Class of material and province in which purchased.	1937-38.	1936-37.	1935-36.	1934-35.
	Rs.	Rs.	Rs.	Rs.
Cotton Materials.				
United Provinces	28,36,883	19,94,050	17,54,824	14,52,662
Bombay	15,93,963	13,94,925	13,28,664	8,69,299
Madras	11,32,729	8,79,618	7,71,755	7,79,057
Bengal	7,72,958	7,55,368	5,51,590	6,70,110
Punjab	2,17,342	1,13,610	1,38,022	28,233
Delhi	1,69,564	41,678	60,043	16,658
Central Provinces	1,45,458	94,733	1,92,665	1,21,288
Indore	1,40,737	1,37,857	..	..
Sind	21,673	15,253	*	*
N. W. F. P.	487	8,311	..	..
Burma	..	..	..	2,294
Mysore	..	..	..	2,105
Hyderabad	..	..	..	563
Total—Cotton Materials ..	70,31,794	54,35,403	47,97,563	39,42,269
Woollen Materials.				
United Provinces..	26,10,791	16,39,819	15,90,044	7,38,403
Punjab	20,93,083	9,86,829	7,77,992	8,10,658
Madras	16,88,700	9,92,669	5,57,615	4,01,012
Bombay	5,68,277	3,01,737	5,21,886	3,71.840
Bengal	2,13,518	2,16,559	83,870	2,92,959
Jaipur	18,694	273	3,605	
Delhi	16,364	16,761	22,690	11,479
Sind	4,866	2,261	*	*
Kashmir	3,784	828	778	2,633
Central Provinces	225	..	..	..
Mysore	..	1,097	..	675
Total—Woollen Materials ..	72,18,302	41,58,833	35,58,480	26,29,659

*Included in Bombay.

Class of material and province in which purchased.	1937-38.	1936-37.	1935-36.	1934-35.
	Rs.	Rs.	Rs.	Rs.
Jute, Hemp and Flax Materials.				
Bengal	7,84,790	10,91,340	9,55,059	13,76,414
Bombay	1,14,958	60,216	94,884	92,083
Punjab	39,830	8,104	47,731	82,166
Sind	33,598	17,983	*	*
United Provinces..	27,441	43,146	3,982	15,971
Madras	15,172	10,677	2,395	6,479
Delhi	12,652	11,791	6,006	5,232
Central Provinces	679	..	..	..
Kashmir	451	569	115	..
Mysore	..	..	..	310
Total—Jute, Hemp and Flax Materials.	10,29,571	12,43,826	11,10,172	15,78,655
Leather Materials.				
United Provinces..	92,583	88,399	94,283	1,17,590
Bengal	56,587	65,363	46,572	30,600
Punjab	33,634	35,751	31,464	28,001
Bombay	14,472	35,857	23,546	26,242
Delhi	558	..	..	..
Sind	91	751	*	*
Madras	22	6,685	2,810	2,452
Gwalior	21	..	..	..
Total—Leather goods ..	1,97,968	2,32,806	1,98,675	2,04,885

*Included in Bombay.

Class of material and province in which purchased.	1937-38.	1936-37.	1935-36.	1934-35.
Engineering, Hardware and Miscellaneous stores.	Rs.	Rs.	Rs.	Rs.
Bengal	3,80,68,332	3,16,05,052	2,40,29,630	1,85,19,163
Bombay	98,50,511	97,06,670	96,79,302	82,97,207
Bihar	59,01,953	24,12,177	38,99,546	30,22,905
Sind	27,37,666	16,51,766	*	*
Punjab	23,17,103	18,58,230	23,73,452	27,26,101
United Provinces..	10,32,264	5,14,825	5,97,762	3,03,625
Delhi	9,39,173	11,85,375	6,26,772	9,83,733
Central Provinces	7,76,884	6,15,809	7,82,780	8,28,290
Madras	4,67,706	7,88,919	6,13,838	6,89,390
Bundi	3,52,500	2,59,996	2,98,491	3,18,563
Hyderabad	1,64,779	52,865	1,09,726	1,13,209
Gwalior	1,28,831	41,647	78,059	75,442
Mysore	77,695	2,36,166	2,83,443	1,80,841
Ajmer-Merwara	54,037	..	..	..
Baroda	43,756	38,693	49,901	1,68,407
Porbunder	34,200	22,496	22,025	13,257
Assam	24,516	11,130	1,43,484	1,72,281
Cochin	15,343	6,428	1,415	..
Baluchistan	8,153	..	3,400	..
Aundh	6,482	7,112	9,499	9,010
Bhavnagar	2,396	152	..	..
N. W. F. P.	792	258	1,032	60
Jaipur	115	..	..	..
Burma	†	21,67,003	23,33,008	11,94,953
Andamans	..	..	125	1,438
Indore	..	..	142	..
Total—Engineering, Hardware and Miscellaneous stores.	6,30,05,187	5,31,82,769	4,59,36,832	3,79,17,875

*Included in Bombay. †Included under Stores purchased direct from abroad.

Class of material and province in which purchased.	1937-38.	1936-37.	1935-36.	1934-35.
Total.	Rs.	Rs.	Rs.	Rs.
Bengal	3,98,96,185	3,37,33,682	2,56,66,721	2,08,89,246
Bombay	1,21,42,181	1,14,99,405	1,16,48,282	96,56,671
United Provinces..	65,99,962	42,80,239	40,40,895	29,28,251
Bihar	59,01,953	24,12,177	38,99,546	30,22,905
Punjab	47,00,992	30,02,524	33,68,661	36,75,159
Madras	33,04,329	26,78,568	19,48,413	18,78,390
Sind	27,97,894	16,88,014	Included in	Bombay.
Delhi	11,38,311	12,55,605	7,15,511	10,17,102
Central Provinces	9,23,246	7,10,542	9,75,445	9,49,578
Bundi	3,52,500	2,59,996	2,98,491	3,18,563
Hyderabad	1,64,779	52,865	1,09,726	1,13,772
Indore	1,40,737	1,37,857	142	..
Gwalior	1,28,852	41,647	78,059	75,442
Mysore	77,695	2,37,263	2,83,443	1,83,931
Ajmer Merwara	54,037	..	..	..
Baroda	43,756	38,693	49,901	1,68,407
Porbunder	34,200	22,496	22,025	13,257
Assam	24,516	11,130	1,43,484	1,72,281
Jaipur	18,809	273	3,605	..
Cochin	15,343	6,428	1,415	..
Baluchistan	8,153	..	3,400	..
Aundh	6,482	7,112	9,499	9,010
Kashmir	4,235	1,397	893	2,633
Bhavnagar	2,396	152	..	..
N. W. F. P.	1,279	8,569	1,032	60
Burma	*	21,67,003	23,33,008	11,97,247
Andamans	..	..	125	1,438
Total—Stores purchased in the Indian market.	7,84,82,822	6,42,53,637	5,56,01,722	4,62,73,343
Total—Stores purchased from Government Departments or Depots (*vide* Appendix VII).	1,31,373	49,916	37,481	1,45,570
Total—Stores purchased direct from abroad (*vide* Appendix VII).	3,17,183	6,02,981	2,65,663	12,17,338
Grand Total ..	7,89,31,378	6,49,06,534	5,59,04,866	4,76,36,251

*Included in Stores purchased direct from abroad.

APPENDIX IX.

Lists of Items of Stores on "Rate" and "Running" contracts.

(*Vide* paragraphs 2 and 30 of the Report.)

A.—ITEMS OF STORES FOR WHICH "RATE" AND "RUNNING" CONTRACTS WERE ENTERED INTO BY THE HEADQUARTERS OFFICE DURING THE YEAR 1937-38.

COTTON.

1. Bags, postal.
2. Bandage, cloth.
3. Bunting cloth, red and green.
4. Capes, waterproof.
5. Cloth, Jaconet.
6. Cloth, grey, domestic.
7. Cloth, sheeting.
8. Coats, waterproof.
9. Cotton waste, white, teased and unteased.
10. Cotton waste, coloured.
11. Dosuti.
12. Drill, blue, grey, khaki and white.
13. Durries.
14. Dusters.
15. Flags, bunting, red and green.
16. Gauze absorbent, cotton, white.
17. Holland cloth.
18. Lining cloth.
19. Long cloth, bleached, grey.
20. Mosquito cloth.
21. Pugri cloth, khaki, red and blue.
22. Pugri cloth, white.
23. Putties, cotton, blue.
24. Sheets, bed.
25. Tapes.
26. Thread, sewing.
27. Towels, hand.
28. Turbans, red.
29. Twill, cotton, khaki.
30. Twine.
31. Umbrellas.
32. Wool, cotton, absorbent.

WOOLLEN.

33. Blankets.
34. Broad cloth, superfine.

WOOLLEN—*contd.*

35. Carpets.
36. Flannels.
37. Jackets, cardigan, waistcoats, etc.
38. Jerseys.
39. Putties.
40. Serges.
41. Socks.
42. Twill cloth, of colours.

JUTE, HEMP AND MISCELLANEOUS.

43. Bags, mail, postal.
44. Buttons, gold.
45. Canvas.
46. Coir yarn and matting.
47. Cordage, manilla.
48. Imitation leather cloth.
49. Lace, gold.
50. Linoleum.
51. Paulins, flax and jute.
52. Tassels, gold.
53. Uniforms, made up, including supply of all garments.

LEATHER.

54. Hides, buff.
55. Portfolios, bags, etc., for postal use.

ENGINEERING AND MISCELLANEOUS STORES.

56. Abrasive materials.
57. Angulars, tin.
58. Badges, brass.
59. Balloons, rubber.
60. Bearings, ball and roller.
61. Belt fasteners.
62. Belting, workshop.
63. Belting, lighting.
64. Bicycles.
65. Boards, building and insulating.
66. Boards, notice or sign.
67. Boards, paper and tin.
68. Bolts and nuts.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

69. Boxes and trays, tin.
70. Boxes, for insurance seals.
71. Brushes, bannister,
72. Brushes, carbon.
73. Brushes for cleaning stamps.
74. Bugles.
75. Buttons, brass, and gilt.
76. Cables, V. I. R. braided and compounded.
77. Cables, V. I. R. insulated tough rubber-sheathed.
78. Cables, V. I. R., insulated, lead alloy sheathed.
79. Cables, flameproof.
80. Cables, locomotive head-light.
81. Candles, wax.
82. Carbons for A. D. wet cells.
83. Ceiling roses, bakelite and porcelain.
84. Cells, caustic soda.
85. Cells, inert and dry.
86. Cells, train lighting, spares for.
87. Cement, ordinary and rapid hardening.
88. Cement, Portland.
89. Charpoys, tubular
90. Chests, cash, iron.
91. Chimneys for lanterns.
92. Compound, metal cleaning.
93. Conduit pipes and fittings.
94. Connectors, porcelain.
95. Cooking ranges.
96. Cords, flexible, V. I. R.
97. Couplers, intervehicle, spares for.
98. Cotters, M. S. split.
99. Cranks, adjustable.
100. Crucibles, plumbago.
101. Cutlery.
102. Dust shields.
103. Dynamos, train lighting, spares for.
104. Electrodes.
105. Fans, electric, ceiling, A. C. and D. C.
106. Fans, electric, table, A. C. and D. C.
107. Files, steel.
108. Files, brass.
109. Fire bricks.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

110. Fire clay.
111. Fire extinguishers and refills.
112. Fish bolts, nuts, and dogspikes,
113. Fittings, carriage body, and metallic.
114. Fittings, vacuum brake.
115. Glass sheets and plates.
116. Glasses, looking.
117. Grinding wheels.
118. Handcuffs.
119. Headlight equipment, spares for.
120. Heaters, electric.
121. Hinges, butt.
122. Hose, canvas, fire service.
123. Hose, canvas, flax, unlined.
124. Hose, delivery, leather, copper rivetted.
125. Hose, I.R., boiler washout.
126. Hose, I. R., braided.
127. Hose, I. R., compressed, air delivery, unarmoured.
128. Hose, I. R., delivery, unarmoured.
129. Hose, I. R., delivery, cold water, armoured.
130. Hose, I. R., flexible.
131. Hose, pneumatic, double braided.
132. Instruments, testing and measuring.
133. Insulating materials :—
    - (*a*) Cotton tape, Egyptian.
    - (*b*) India rubber strip, pure para.
    - (*c*) Tap, cotton, webbing.
    - (*d*) Tape, yellow, Empire "Biascut".
    - (*e*) Tape, adhesive, black.
    - (*f*) Tapes and sheets, Micanite.
    - (*g*) Varnish, insulating, air drying and stoving.
    - (*h*) Compounds for cable sealing boxes.
    - (*i*) Enamel, insulating.
    - (*j*) Tape, asbestos.
134. Jaws, loose, spring, steel.
135. Jointings, asbestos fibre.
136. Keys, mild steel.
137. Lamps, electric.
138. Lampholders.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

139. Lamp locks, brass.
140. Lanterns, hurricane.
141. Lanterns and common lamps, tin.
142. Leather reviver.
143. Letter boxes.
144. Locks.
145. Metal polish, liquid.
146. Meters, electric.
147. Meters, water.
148. Motor vehicles and spare parts :—
   (*a*) Chevrolet vehicles and spare parts.
   (*b*) Ford vehicles and spare parts.
   (*c*) Spare parts for Morris Cars, Wolseley Cars and Morris Commercial vehicles.
   (*d*) Spare parts for Albion 6-wheeled 3 ton model I. O. 32.
   (*e*) Spare parts for Albion 30 Cwts. model I. O. 41 chassis.
   (*f*) Spare parts for Thornycroft 'A 4' and 'A 5' medium 6-wheeled lorries.
   (*g*) Spare parts for Humber Snipe touring cars.
   (*h*) Spare parts for Morris Commercial 6-wheeled tractors and CD Morris Commercial normal control chassis.
   (*i*) Spare parts for commercial vehicles.
   (*j*) Spare parts for Morris 15 Cwt., 4-wheeled trucks and Morris Commercial 8 Cwt. P. O. Mark II 25 H. P. 4-wheeled trucks.
149. Packing, asbestos.
150. Pig iron.
151. Pipes and fittings, mild steel.
152. Pipes, hume.
153. Pipes, asbestos cement.
154. Pipes and specials, cast iron.
155. Pipes and specials, stoneware.
156. Plates, mild steel.
157. Plates, bearing, mild steel.
158. Point rodding, tubular, non-galvanised.
159. Poles, steel, tubular.
160. Pumice, rubbing blocks, stone and powder.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

161. Refills for Konus Kemic fire extinguishers.
162. Rope, wire.
163. Rivets, snaphead.
164. Road dressing materials.
165. Road danger signs, enamelled iron.
166. Roofing materials.
167. Sac elements.
168. Safes.
169. Scales and weights.
170. Seals, lead.
171. Separators, wooden for train lighting cells.
172. Shades :—
   (*i*) Enamelled iron.
   (*ii*) White opal, conic and langham.
   (*iii*) Vellum for table standards.
173. Sheets, asbestos cement and accessories.
174. Sheets, mild steel, galvanised, corrugated and plain.
175. Sheets, zinc, plain.
176. Shellac.
177. Signals, fog.
178. Signalling and interlocking materials.
179. Sluice valves and tail pieces.
180. Soap, hard, soft and liquid.
181. Spearhead, brass bells and iron rings.
182. Speed recording charts for electric locomotives.
183. Springs, I. R.
184. Springs, I. R. auxiliary bearing.
185. Springs, I. R. auxiliary buffers.
186. Stamp dampers.
187. Standard tables, electric, bakelite.
188. Steel sections.
189. Steel springs.
190. Steel, tool.
191. Superheater elements.
192. Switches, tumbler, single pole, surface and sunk types.
193. Switches, tumbler with fuses, train lighting.
194. Switches, tumbler, single pole combined with plugs.
195. Switches with fuses, iron clad, double pole.

ENGINEERING AND MISCESLANEOUS STORES—*concld.*

196. Tallow.

197. Tools, small and hand.

198. Tools, track.

199. Tyres and tubes, rubber.

200. Wall plugs and sockets.

201. Wire, copper, bare, solid, hard drawn.

202. Wire, copper, cadmium.

203. Wire, copper, rectangular.

204. Wire, copper, single and double cotton covered and double silk covered.

205. Wire gauze, G. I.

206. Wire netting, G. I.

207. Wire, steel, G. I.

208. Wood screw.

209. Zinc, cylinderical cutaway pattern for Leclanche cells.

210. Zincs, circular for Leclanche cells.

211. Zinc elements for A. D. wet cells.

OILS, PAINTS AND CHEMICALS.

212. Acids, Hydrochloric, Nitric and Sulphuric.

213. Alumina ferric.

214. Ammonium chloride.

215. Bituminous solutions.

216. Carbide of calcium.

217. Caustic soda.

218. Chloride of lime.

219. Cobalt liquid driers.

220. Creosote.

221. Disinfectants.

222. Electrolyte.

223. Gas, acetylene, dissolved.

224. Gas, carbonic acid.

225. Gas, oxygen.

226. Graphite.

227. Greases.

228. Liquid chlorine.

229. Oil, castor.

230. Oil, cleaning.

231. Oil, cocoanut.

232. Oil, fuel.

233. Oil, fuel and furnace.

234. Oil, gas making.

OIL PAINTS AND CHEMICALS—*contd.*

235. Oil, kerosene.

236. Oil, linseed.

237. Oil, lubricating.

238. Oil, stand.

239. Paints, enamels, varnishes, dry pigments, etc.

240. Paint, maroon coach.

241. Paint remover.

242. Petrol.

243. Rosin.

244. " Safolene " cleaner.

245. Spirit, methylated, denatured.

246. Sulphate of alumina.

247. Sulphate of copper.

248. Tar, crude.

249. Turpentine, genuine and white spirit.

B.—CONTRACTS ENTERED INTO BY THE CONTROLLER OF PURCHASE, CALCUTTA.

TEXTILES AND LEATHER STORES.

1. Bags, gunny, Liverpool twill.
2. Bags, gunny, heavy
3. Buttons, aluminium, large and small.
4. Butts, leather, tanned English.
5. Canvas, jute country.
6. Canvas jute, unproofed.
7. Caps, black, cherry top.
8. Caps, black, forage.
9. Caps, blue with soft top
10. Caps, blue, cloth, with patent leather drooping peak.
11. Caps, drill, khaki.
12. Caps, valvet, black.
13. Cases, pillow,
14. Cloth, bandage.
15. Cloth, dosuty.
16. Cloth, hessian.
17. Cloth, long.
18. Cloth, madapalam.
19. Cloth, mulmul.
20. Cloth, nainsook.
21. Cloth, saloo, red.

TEXTILES AND LEATHER STORES—*contd.*

22. Cloth, selvyt.
23. Flags, banner, red.
24. Hats, sola, khaki covered, with pugree.
25. Helmets, cork, white drill.
26. Hides, tanned, buffalo.
27. Hides, tanned, buffalo, country.
28. Hides, tanned, butt.
29. Hides, tanned, cow, country
30. Hides, tanned, full.
31. Hides, tanned, cow, half.
32. Jute, combings.
33. Jute, gasketting, 8 ply.
34. Kit bags, flax, canvas.
35. Leather for washers.
36. Line, log.
37. Newar, cotton, khaki.
38. Pouches, leather.
39. Rope, jute.
40. Ropes, manilla.
41. Sheets, bed.
42. Sheets, draw, grey.
43. Tape, cotton, white.
44. Thread, cotton wicks.
45. Thread, hessian, waste.
46. Twine, flax, 8 cord.
47. Twine, flax, 3 ply.
48. Twine, hemp, 2 ply and 3 ply.
49. Twine, jute, 3 ply.
50. Twine, jute country.
51. Twine, sailmakers.
52. Umbrellas.
53. Wicks, tape, castor oil.
54. Wicks tape, kerosene oil.
55. Wool worsted trimming, grey.

ENGINEERING AND MISCELLANEOUS STORES.

56. Almirah, steel.
57. Acid, sulphuric.
58. Acid, hydrochloric.
59. Acid, nitric.
60. Angles, mild steel.
61. Apparatus, chemical.
62. Augers, carpentër.

TEXTILES AND LEATHER STORES—*concld.*

63. Axes, felling.
64. Bars, steel, round.
65. Beaters, wooden, iron shod.
66. Belting, train lighting.
67. Bill hooks.
68. Billers, wooden.
69. Blades, hacksaw.
70. Bones, cuttlefish.
71. Bottles, water, aluminium.
72. Buckets, fire.
73. Buckets, G. I.
74. Brooms, cocoanut.
75. Brushes, bannister.
76. Brushes, paint, ground, oval.
77. Brushes, sashtool.
78. Brushes, varnish, flat.
79. Brushes, wire.
80. Cardboard, corrugated.
81. Cement, Rohtas.
82. Chalk, white.
83. Conductor, copper.
84. Crockery.
85. Crucible salamander.
86. Cupboards, steel shelving.
87. Cutlery.
88. Drill bits.
89. Dubbin, black.
90. Electrodes.
91. Emery cloth.
92. Expanded metal.
93. Fittings headlight.
94. Flats, mild steel.
95. Flour, fine.
96. Flit.
97. Gas, nitrous oxide.
98. Glass paper.
99. Grease, A. P. C.
100. Grease, 'Texaco'.
101. Grease, Socony.
102. Gum, mustake.
103. Hammers, hand.
104. Handles, hammer.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

105. Hexagonal bars, M. S. bright.
106. Hooks, M. S.
107. Holders, steel.
108. Hose, canvas.
109. Hose, washout, I. R.
110. Hydrometers.
111. Jars, glass, battery.
112. Nails of sorts.
113. Oil, B. O. C.
114. Oil, chloridol.
115. Oil, Vacuum.
116. Paint remover.
117. Phowrahs.
118. Plastic compound.
119. Plates, M. S.
120. Pliers, cutting and twisting.
121. Rawlplugs.
122. Rings, crucible, plumbago.
123. Rods, M. S., copper coated.
124. Rope wire, galvanised.
125. Rounds, M. S. bright.
126. Screw driver, carpenter.
127. Screws, M. S. C. S. head.
128. Screws, wood, brass, iron.
129. Seals.
130. Seal holders, tin.
131. Shades, enamelled iron.
132. Sheets, asbestos.
133. Sheets, glass,white.
134. Sheets, M. S.
135. Shovels, stoking.
136. Soap, carbolic.
137. Soap, coarse.
138. Soap, monkey brand.
139. Soda ash, light.
140. Solder,resin core.
141. Springs, I. R. buffer.
142. Springs, I. R.
143. Springs, steel, flat.
144. Steel, tool.
145. Steel, high speed.
146. Steel, special.

ENGINEERING AND MISCELLANEOUS STORES—*concld.*

147. Steam jointing.
148. Strappings.
149. Tin plate.
150. Utensils, aluminium.
151. Watches.
152. Wheels, grinding.
153. Whiting.
154. Wire, bronze, silicon.
155. Wire, M. S. galvanised.
156. Wood plugs.

C.—CONTRACTS ENTERED INTO BY THE CONTROLLER OF PURCHASE, BOMBAY.

TEXTILE AND LEATHER STORES.

1. Bags, canvas, dark grey.
2. Bags, gunny.
3. Bags tool with straps.
4. Bellows, leather.
5. Canvas, green.
6. Caps, blue, serge.
7. Cloth, long.
8. Cord, seaming carriage.
9. Drill.
10. Jute, dressed.
11. Serge, blue.
12. Thread, sewing, cotton and linen.
13. Twist, cotton.
14. Wicks, tape, cotton.

ENGINEERING AND MISCELLANEOUS STORES.

15. Balls, stainless, steel.
16. Belt, rubber, for fans.
17. Bicycles, Hercules and accessories.
18. Blades, for carriage fans.
19. Bolts, door barrel.
20. Bolts, door tower.
21. Bonding clamps.
22. Boxes, joint.
23. Brooms, hair, Goa.
24. Brushes, carbon.
25. Brushes, painters, foundry, etc.
26. Brushes, spoke.
27. Brushes, varnish.
28. Buckets, G. I.

ENGINEERING AND MISCELLANEOUS STORES—*contd.*

29. Cartridges.
30. Charcoal.
31. Claws, wire.
32. Clips for locking lamps.
33. Clips, link.
34. Clocks.
35. Cocks, brass.
36. Cocks, stop.
37. Cocoanut husks.
38. Cords, telephone.
39. Cords, for control lead set receiver.
40. Covers, bakelite.
41. Cut outs, porcelain.
42. Diaphragms, carbon.
43. Fasteners, belt carded.
44. Fittings, berth light.
45. Fittings, panel single light.
46. Fittings, steam and water.
47. Fuse plugs with socket.
48. Globes, glass.
49. Handles, wood.
50. Hinges, butt.
51. Insulator, rubber.
52. Jars, brown stone.
53. Lamp holders.
54. Lime, unslacked.
55. Nails, iron wire.
56. Nails, rose head, W. I.
57. Needles, sailmaker's
58. Pliers, electrician's.
59. Regulator for carriage fans.
60. Rings, cone packing.
61. Rings, India rubber.
62. Rivets copper flat head.
63. Rods, fibre red.
64. Shades, opal glass.
65. Sheets, cotton pressed.
66. Sheets, fibre red.
67. Sheets, mica.
68. Sheets, vulcanized.
69. Stay tube, iron.

ENGINEERING AND MISCELLANEOUS STORES—*concld.*

70. Tape micanite, flexible.
71. Tee boxes.
72. Timepieces.
73. Tubes, non-fluid.
74. Valves, wheel, gunmetal.
75. Vices, bench handles, wood.

D.—CONTRACTS ENTERED INTO BY THE CONTROLLER OF PURCHASE, KARACHI.

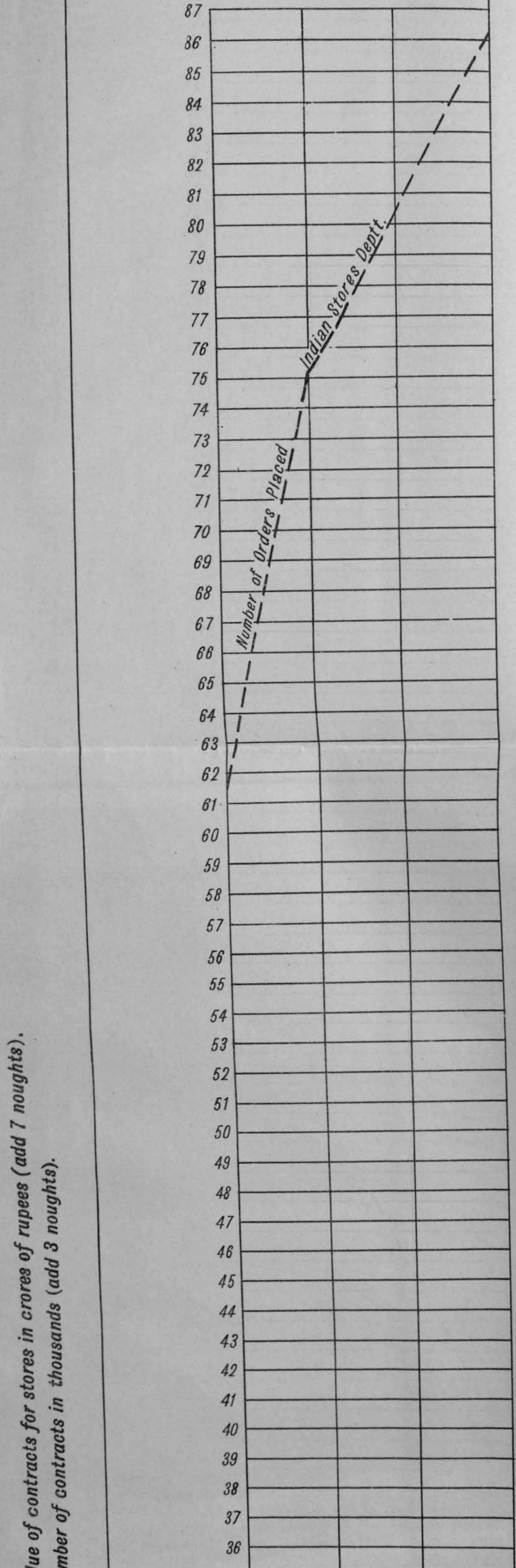
1. Bicycles.
2. Blades, hacksaw.
3. Boards, building.
4. Bolts and nuts, M. S.
5. Brushes bannister.
6. Brushes, paint.
7. Brushes, scrubbing.
8. Brushes, wire.
9. Buckets, G. I.
10. Clocks.
11. Crockery.
12. Cutlery.
13. Emery cloth.
14. Fittings, door.
15. Fittings, water.
16. Files, cast steel.
17. Flit.
18. Handles.
19. Kodalies.
20. Nails, iron wire.
21. Panes, glass.
22. Pickaxes.
23. Rivets, M. S.
24. Sand paper.
25. Screws, iron and brass.
26. Shovels.
27. Soda, caustic.
28. Soda, washing.
29. Solignum.
30. Time pieces.
31. Tumblers, glass.
32. Washers, M. S.

APPENDIX - X.

VALUE OF STORES PURCHASED AND NUMBER OF CONTRACTS PLACED BY THE LONDON AND INDIAN STORES DEPARTMENTS.

(Vide paragraphs 2 & 35 of the Report).

The London Store Department figures represent the value of contracts for stores and freight coverted into Indian currency at a uniform rate of 1 s. 6 d. to the rupee. The Indian Stores Department figures represent the value of contracts placed.



APPENDIX XI.

Comparative statement of purchases made by the London and Indian Stores Departments.

The figures are in thousands of rupees. (*Vide* paragraphs 2 and 35 of the Report.)

Indenting Departments.	Textiles and Leather stores.		Engineering, Hardware, Electrical and Miscellaneous Stores.		Other classes of stores. (a)		Total.	
	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.	London Stores Department.	Indian Stores Department.
1. *Central Departments*—Defence—								
1934-35	509	5,316	805	3,291	8,897	..	10,211	8,607
1935-36	1,725	4,915	1,126	5,452	5,598	..	8,449	10,367
1936-37	2,402	6,860	1,502	5,091	9,503	..	13,407	11,951
2. *Central Departments*—Civil—								
1934-35	9	770	157	4,927	1,843	..	2,009	5,697
1935-36	14	929	217	8,146	1,454	..	1,685	9,075
1936-37	20	835	106	5,884	1,076	..	1,202	6,719
3. *Railways*—								
1934-35	3	2,559	465	23,939	7	..	475	26,498
1935-36	3	2,910	351	26,111	23	..	377	29,021
1936-37	3	2,532	355	33,631	14	..	372	36,163
4. *Provincial Governments*—								
1934-35	116	908	638	4,310	1,125	..	1,879	5,218
1935-36	59	1,158	5,929	5,193	1,064	..	7,052	6,351
1936-37	83	1,254	748	5,787	2,697	..	3,528	7,041
5. *Indian States, Foreign Governments and Quasi-Public bodies*—								
1934-35	..	32	..	1,584	..	..	..	1,616
1935-36	..	10	..	1,081	..	..	..	1,091
1936-37	..	31	..	3,002	..	..	..	3,033
Totals—								
1934-35	637	9,585	2,065	38,051	11,872	..	14,574	47,636
1935-36	1,801	9,922	7,623	45,983	8,139	..	17,563	55,905
1936-37	2,508	11,512	2,711	53,395	13,290	..	18,509	64,907

N.B.—The figures of the London Stores Department have been converted at the rate of 1*s.* 6*d.*=Re. 1.

(*a*) Stores not dealt with by the Indian Stores Department, *e.g.*, Medical Stores, munitions, stationery and printing, stamps, currency, foodstuffs, etc.

APPENDIX XII.

List of specifications framed by the Indian Stores Department current at the end of the year 1937-38.
(*Vide* paragraphs 3 and 37 of the Report).

INDEX.

Section No.	Name of stores. Main head.	Sub-head.	Classification reference.
1	Bridgework	..	A.
2	Engineer's plant (excluding petty tools)	..	B.
3	Workshop machinery and heavy tools	..	C.
4	Ballast and permanent-way materials..	..	D.
5	Rolling stock	..	E.
6	Station materials and fencing ..	..	F.
7	General	..	G.
		(*i*) Building materials ..	G/Buildings.
		(*ii*) Chemicals	G/Chemicals.
		(*iii*) Fuel	G/Fuel.
		(*iv*) Furniture	G/Furniture.
		(*v*) Drawing, mathematical and surveying instruments	G/Instruments.
		(*vi*) Lamps and lamp fittings	G/Lamps.
		(*vii*) Leather and India rubber goods	G/Leather.
		(*viii*) Metals	G/Metals.
		(*ix*) Miscellaneous ..	G/Miscellaneous.
		(*x*) Oils and lubricants ..	G/O.
		(*xi*) Paints and Painter's materials	G/P.
		(*xii*) Printing presses and material	G/Prints.
		(*xiii*) Sanitary Stores ..	G/Sanitary.
		(*xiv*) Stationery	G/Stationery.
		(*xv*) Cloth, Clothing and equipment	G/Textiles.
		(*xvi*) Timber	G/Timber.
		(*xvii*) Tools	G/Tools.
		(*xviii*) Hardware, copper, tin and zinc ware ..	G/Ware.
		(*xix*) Waterworks stores ..	G/W. W.
8	Electrical plant and materials	..	H.
9	Power and industrial plant ..	..	P.I.

List of Indian Stores Department General Specifications current at the end of the year 1937-38.

Specification No.	Description.	Remarks.
	BRIDGEWORK—A.	
‡A-33 L	Steelwork	
A-34 C	Steel sheet piling with clutch (joist pattern) ..	Saleable.
A-35 K	(*Cancelled.*)	
A-40 D	Steel bridgework.	
A-48 E	Tank and staging (corr. No. 1 of March 1937) ..	Saleable.
A-49 A	Tanks steel. welded, with staging, welded or riveted ..	Saleable.
	ENGINEERS PLANT (EXCLUDING PETTY TOOLS)—B.	
B-45 B	Vertical boilers	Saleable.
B-50 D	Boilers, loco. multitubular	Saleable.
B-53 B	Hand operated, overhead traversing and travelling crane	Saleable.
	WORKSHOP MACHINERY AND HEAVY TOOLS—C.	
C-29 B	Machine tools	Saleable.
	BALLAST AND PERMANENT-WAY MATERIALS—D.	
D-1 D	Light railway track for construction work (Not for passenger traffic)	Saleable.
D-2 C	Tip trucks for 1′-6″, 2′-0″ and 2′-6″ gauge railway contractors type.	
D-6	(*Cancelled*).	
D-15	(*Cancelled*).	
D-16 A	(*Cancelled*).	
D-17 A	(*Cancelled*).	
D-18 A	Steel screw spikes	Saleable.
	ROLLING STOCK—E.	
E-28	Weigh-bridges.	
E-29 A	Engine turntables.	
E-32	Steam locomotive crane.	
E-37 B	Steel laminated springs for locomotives, carriages and wagons for Railways.	
E-38	Cast steel wheels and axles, 2′-6″ gauge.	
E-42 D	Rivets or rivet bars, mild steel.	
E-47 B	(*Cancelled*).	
E-48	Cast steel wheels and axles, 2′-6″ gauge for light tip trucks and other unimportant work.	
E-49 A	Cast iron super heater headers for locos. for railways.	
E-50 B	(*Cancelled*).	
E-53	Axle boxes, cast steel, for railway rolling stock.	
E-54	(*Cancelled*).	
E-55	Vacuum Gauge 6″ Single.	

Specification No.		Description.	Remarks.
		CHEMICALS—G.	
G/Chemicals-9 C		Nitric acid, commercial	Saleable.
,,	11 B	Hydrochloric (or muriatic) acid commmercial. (Suitable for flux.)	Saleable.
,,	12 B	Hydrochloric acid, pure	Saleable.
,,	14 B	Sulphuric acid, concentrated, for accumulators ..	Saleable.
,,	15 A	Sulphuric acid, commercial quality	Saleable.
,,	16 A	Alumino ferric	Saleable.
,,	17 A	Sulphate of alumina	Saleable.
,,	18 C	Coppper sulphate	Saleable.
,,	19 A	Potassium cyanide for surface hardening of tools ..	Saleable.
,,	20 B	Acetylene gas (dissolved) for industrial purposes.	
,,	22 A	Chloride of Lime or Bleaching powder	Saleable.
,,	23 A	Calcium Carbide for acetylene gas productions ..	Saleable.
‡,,	24 D	Salammoniac (Ammonium Chloride)	Saleable.
,,	25 A	Gas carbonic acid (carbon dioxide).	
,,	26 B	Caustic soda, Commercial	Saleable.
,,	27	Borax for brazing	Saleable.
,,	28	Soda ash	Saleable.
,,	29 A	Alum (potash) Commercial	Saleable.
,,	31	Sodium cyanide for surface hardening of tools ..	Saleable.
,,	32	Stable bleaching powder or chloride of lime (Corr. No. 1 of February 1937)	Saleable.
		LAMPS AND LAMP FITTINGS—G.	
G/Lamps-25		Hurricane lanterns, storm and weather-proof ..	Saleable.
		LEATHER AND INDIA RUBBER GOODS—G.	
G/Leather-43	A	Leather, buffalo and cow and sheep skin	Saleable.
,,	48 B	Boots ammunition, No. 5 quality.	
,,	56 C	Boots, ammunition for Police constables	Saleable.
‡,,	61 A	Skin wash or chamois leather. (Corr. No. 1 of March 1938.)	
,,	64 A	Upholstery hides	Saleable.
		METALS—G.	
G/Metals-9		Manganese steel castings.	
,,	16 E	Mild steel rods for ferro-concrete work ..	Saleable.
,,	17 A	Case hardening and welding quality steel bars and billets.	
,,	40 B	Tin plate	Saleable.

Specification No.	Description.	Remarks.
	METALS—G—*contd.*	
G/Metals-41 H	Galvanized mild steel sheet and ridging (plain and corrugated)	Saleable.
‡,, 45 B	Lead sheet.	
‡,, 46 B	Pig lead	Saleable.
,, 48 B	Pig iron	Saleable.
,, 52	Copper alloys for carriage and wagon axle-box brasses.	
,, 53 B	Soft solders.	
,, 54 B	Tin sticks (for tinning cooking vessels and similar purposes)	Saleable.
,, 55 A	Tin ingots (ordinary and refined)	Saleable.
,, 56 A	(*Cancelled*).	
,, 57 A	(*Cancelled*).	
‡,, 58 B	Copper sheets, annealed, half hard or hard rolled ..	Saleable.
,, 59 A	Brass sheets, annealed, for spinning or cold working and die pressing.	
,, 60	(*Cancelled*).	
,, 67	(*Cancelled*).	
,, 68	(*Cancelled*).	
,, 69	(*Cancelled*).	
,, 70	(*Cancelled*).	
,, 71 A	(*Cancelled*).	
,, 72 A	M. S. sheet for the Telegraph Department	Saleable.
,, 75	Zinc (or spelter)	Saleable.
	MISCELLANEOUS—G.	
G/Misc.-I F.	Padlocks and locks, box, drawer, etc.	Saleable.
,, 15 A	Safes, burglar resisting, non-fire resisting.	
,, 25 A	Buttons, hollow, and badges, brass, gilding metal, nickel silver, German silver, white metal, silver and 'bronzed'	Saleable.
,, 30 B	Fire extinguishers, chemical operated, soda acid or foam types	Saleable.
,, 32 D	Seals, lead, circular type for general purposes ..	Saleable.
35 B	Liquid metal polish (Corrigendum No. 1 of July 1935)	Saleable.
‡,, 36 B	Lead wool or yarn for caulking	Saleable.
,, 37 C	(*Cancelled*).	
,, 38 A	Fire bricks.	
,, 39	Fire clay.	
,, 40 A	Candles, wax, long	Saleable.
,, 41 A	Candles, wax, carriage	Saleable.

Spcification No.	Description.	Remarks.
	MISCELLANEOUS—G—*contd.*	
G/Misc.-51 A	Vitreous enamelled sheet steel gauges and numeral plates	Saleable.
,, 52	Feeders, oil, spring (one pint and half pint capacity).	
,, 57 B	Unlined flax canvas fire hose	Saleable.
,, 58 B	Unlined flax canvas, water delivery hose, for ordinary purposes	Saleable.
,, 59 A	Unlined flax canvas hose, water column	Saleable.
,, 61	Plaster of Paris	Saleable.
,, 62 A	Rosin	Saleable
‡ ,, 64 B	Glass, plate and sheet	Saleable.
‡ ,, 66 B	Road signs and standards (Corrigendum No. 1 of September 1936 and corr. No. 2 of July 1937) ..	Saleable.
* ,, 68	Boiler washout hose for use on Railway	Saleable.
,, 69	Hose, India rubber, compressed air delivery.	
,, 70	Hose, India rubber, cold water or ordinary purpose.	
,, 72	Tar, coal (for road purposes)	Saleable.
,, 73 C	Weighing machines, platform	Saleable
,, 74 A	Paraffin wax for insulating purposes	Saleable
,, 75	Beeswax	Saleable.
,, 76	Mastic	Saleable
‡,, 78 A	Black and galvanized, M. S. square or hexagonal head coach screws with gimlet points (Corr. No. 1 of March 1938). ..	Saleable.
,, 79	Hand operated bellows	Saleable.
,, 80	Packing hemp and jute for water pipe and gland packing purposes	Saleable.
,, 81	Packing, steam, jointing and other asbestos goods ..	Saleable.
* ,, 82	Greased yellow hemp or flax plaited packing.	
,, 84	Handcuffs with female keys (adjustable, non-adjustable and flexible types).	
,, 85	Buttons, solid, white metal for Indian State Railways	Saleable.
†,, 86	Bolts, nuts, studs and washers, black and galvanised (Corrigendum No. 1 of February 1938).	
	OILS AND LUBRICANTS.	
G/O. ‡ 91 A	Castor oil, special quality.	
G/O. 101/1 to 101/86 * 2 ‡ 35	Oils and Lubricants. (Corrigendum No. 1 of August 1937) and (Corrigendum No. 2 of October 1937) (Pamphlet)	Saleable.
	MISCELLANEOUS MATERIALS.	
G/O. P. 1 A	Castor seed	Saleable.
,, 2	Button lac	Saleable.
3 C	Shellac	Saleable.

Specification.	Description.	Remarks.
	MISCELLANEOUS MATERIALS—*contd.*	
G/O-P. 4 B	Spirits, denatured, methylated	Saleable.
" 13	Oil, air-craft medium.	
" 14	Oil, air-craft heavy.	
" 33 C	Creosote oil	Saleable.
" 38	Petrol, aviation.	
" 60 C	Soap, hard	Saleable.
" 61 C	Soap, soft	Saleable.
" 64 A	(*Cancelled*).	
" 65 A	Tar, crude	Saleable.
" 66 A	Pitch, coal tar, medium (for road making, etc.) ..	Saleable.
" 68 A	Oxidized (blown) petroleum bitumen	Saleable.
" 69 A	Steam refined petroleum bitumen	Saleable.
" 162	Varnish, insulating, black stoving.	
" 163	Varnish, insulating, black air-drying.	
" 164	Compound special high-melting, tropical for cable, sealing boxes, suitable for 6,000 volts working pressure.	
" 395	Temporary rust preventive.	
	PAINTS AND PAINTER'S MATERIALS, ETC.—G.	
G/P-307/1 to 307/256.	Pigments paints, varnishes, painter's oils and miscellaneous painter's materials. (Corr. No. 1 of August 1936.) (Pamphlet.)	Saleable.
* G/P-307/225	Stand Oil.	
* G/P-307/257	Cobalt liquid driers.	
	TIMBERS—G.	
G/Timber-30 C	Sleepers, Deodar, First Class.	
" 34 A	Teak squares.	
" 35	Teak scantlings.	
" 36 A	Chir or Dhup squares (*Pinus Longifolia* or *Canarium euphyllum*).	
" 37	Toon squares or scantlings (*cedrela toona*).	
" 38 A	Sal Sleepers, First Class.	
" 39	Sal Sleepers, Second Class.	
	TOOLS—G.	
G/Tools- 1 B	Tools for earthwork, etc. (picks and beaters, kodalies, powrahs, mamooties or hoes, sledge and other hammers, jumper and drill steel) ..	Saleable.
2	Anvils.	
3 A	Shovels.	

Specification No.	Description.	Remarks.
	HARDWARE, COPPER, TIN AND ZINC WARE—G.	
G/Ware -30 C	Wire, ordinary, steel, hard or annealed, round or half round, either black or galvanised. (Corrigendum No. 1 of September 1934)	Saleable.
" 31 B	Iron and steel hoop (for bundling of bhoosa by machinery or otherwise strapping packing cases, etc.) ..	Saleable.
" 32 D	Wire, barbed (galvanized steel—2 strand) (Corrigendum No. 1 of September 1934)	Saleable.
" 33 C	Wire, ordinary steel, round, either black or galvanised, (for making mattress cases for boulder filling, for flood protection or similar work)	Saleable.
" 35 A	Brass wire gauze mosquito-proof.	
" 36 B	Wire, galvanised, strand, fencing. (3 ply and 7 ply)..	Saleable.
" 37	(*Cancelled*).	
" 38	Small ropes or cords of steel wire.	
" 39 A	Steel wire ropes	Saleable.
	WATERWORKS STORES—G/W/W.	
G/W/W -27 C	(*Cancelled*).	
" 34 A	Steel pipes and specials for water mains and hydraulic power pipe lines	Saleable.
" 35 B	Sluice valves	Saleable.
" 43 B	Lead pipes for water.	
" 44 B	W. I. or M. S. pipes and fittings for gas, water and steam	Saleable.
" 54 A	Water Meters	Saleable.
" 55	C. I. Spigot and socket, rain water drain pipes and fittings. (Corrigendum No. 1 of November 1936)	Saleable.
	ELECTRICAL PLANT AND MATERIALS—H.	
H-23 A	Hand shield side entry, and face entry pattern, two pin wall plugs and sockets for circuits upto 250 volts between poles (without earthing connection)	Saleable.
H-24 A	Handshield side entry, and face entry pattern, three pin type wall plugs and sockets (two-pin and earth type) for circuits upto 250 volts between poles (with earthing connection)	Saleable.
H-25 A	Reversible and non-reversible protected type, two pin plugs and sockets for circuits upto 250 volts between poles (with earthing connections)	Saleable.
H-26 A	Quick make and break tumbler switches (for use on circuits upto 250 volts)	Saleable.
‡ H-27 B	Cable, electric, dry core, paper insulated, telegraph, multiple, twin, telephone and composite	Saleable.
‡ H-28 A	Cable, electric, dry core, paper insulated (telephone) (Addendum No. 1 of December 1937)	Saleable.
H-29 A	Copper and bronze jointing sleeves, for telegraph and telephone purposes	Saleable.

Specification No.	Description.	Remarks.
	ELECTRICAL PLANT AND MATERIALS—H—*contd.*	
H-34 B	Insulators, porcelain, pin and shackle type, for overhead transmission lines upto 650 volts working pressure	Saleable.
H-42 A	Condensers, metal cased, 1st grade, for telegraphs and telephones	Saleable.
‡H-45 A	Poles tubular Steel for electric power transmission	Saleable.
H-46 C	Electrical flexible cords, single conductors, etc.	
H-48 F	Fans, ceiling with regulators (with and without condensers). A. C.	Saleable.
H-50 B	Portable electric insulation and resistance testing sets	Saleable.
H-51 C	Switchgear, iron clad, flexible unit type, for A. C. or D. C. constant speed motors	Saleable.
H-55 G	Fans, ceiling, with regulators (D. C.) (Corrigendum No. 1 of September 1936)	Saleable.
‡ H-56 E	Conductors, circular, copper, hard drawn, solid and stranded, for overhead power transmission purposes	Saleable.
H-57 B	Cable, single core, pure and V. I. R., insulated, taped, braided and compounded, 250 volts, 600 megohms grade	Saleable.
H-58 C	Wood casing and capping and accessories for electric wiring	Saleable.
H-60 B	Wire, copper, hard drawn, bare for telegraphs or telephones. (Corrigendum No. 1 of November 1933 and Corrigendum No. 2 of September 1934) ..	Saleable.
H-61 E	Cables, paper insulated, lead covered and armoured for electricity supply	Saleable.
‡ H-64 D	Fans, electric, desk or pedestal type, D. C.	Saleable.
‡ H-65 D	Fans, electric, desk or pedestal type, A. C.	Saleable.
H-66 C	Composition insulators for the P. and T. Department (Corrigendum August 1933)	Saleable.
H-67 C	Cable, single core, V. I. R. or 'ITE' insulated, flame retarding, and fire resisting (250 volts) 600 megohms grade	Saleable.
H-68 C	Two and four core, twin and quad twisted, compound insulated, lead covered and armoured, telegraph cable	Saleable.
H-69 A	Cable, single core V. I. R. insulated tropical grade, taped, braided and compunded (250 volts), 600 megohm grade	Saleable.
H-70 A	Cords, instrument (tropical finish).	
H-71 D	Wire, copper, silk covered	Saleable.
H-72 C	Wire, copper, cotton covered	Saleable.
H-73 A	Four core, rubber insulated, lead covered and under water telegraph cable	Saleable.

Specification No.	Description.	Remarks.
	Electrical Plant and Materials—H—*concld.*	
H-76 C	Insulators, porcelain, screw pattern	Saleable.
H-77 A	Cable, multicore telephone switchboard (tropical pattern with enamelled conductors)	Saleable.
H-80 A	7 Strand steel wire, 450 lbs. per mile	Saleable.
H-81 A	(*Cancelled*).	
H-82 A	(*Cancelled*).	
H-83 C	Galvanised iron and steel wires for telegraphs, telephones and cables. (Corrigendum No. 1 of June 1936 and Corrigendum No. 2 of February 1937) ..	Saleable.
H-93 B	Caustic soda primary cells (zinc, copper, oxide type) renewals and battery jars.	
H-94	Glass battery jars	Saleable.
H-95 A	(*Cancelled*).	
‡ H-96 B	Overhead spanning aerial line cable (Corr.No. 1 of January 1938.)	Saleable.
H-97 A	Cable, single core, tropical pattern with enamelled conductor for telephone switchboard or for winding special armatures, etc.	
H-98 A	Steel cored, copper weld wire. (Corrigendum No. 1 of July 1935 and Corrigendum No. 2 of May 1936)	Saleable
‡ H-103 B	Sack Type wet Leclanche primary cells.	
‡ H-117 C	Wire, line, cadmium copper continuously insulated No. 12 S. W. G.	Saleable.
‡ H-119 A	Bronze wires for telegraphs and telephones.	
‡ H-120 A	Stationery Batteries (lead acid type).	
‡ H-121 A	Stay sets for poles.	
* H-122	Air depolarising type primary cells using ammonium chloride solution.	
	Power and Industrial Plant—P. I.	
P.-I.-19 B	Dragline excavator, light weight, cater-pillar type, oil engine operated.	
P. I.-20 A.	Dragline excavator, light weight, cater-pillar type, steam operated, coal firing.	
P. I.-35 B	Dragline excavator, light weight, cater-pillar type, steam operated, coal or oil firing.	
P. I.-38 D	Petrol paraffin engines	Saleable.
P. I.-40 A	Motor boats.	
P. I.-42 A	Steam pile driving plant	Saleable.
‡P. I.-43 L	Engines, internal combustion (using crude oil) ..	Saleable.
P. I.-45 B	Dragline excavator, medium weight, cater-pillar type, steam operated, coal or oil firing.	
P. I.-60 A	Centrifugal pumps for low and medium lifts ..	Saleable.
P. I.-61 A	Stone breaker and screen..	Saleable.
P. I.-62 A	Mortar grinding, mill	Saleable.
P. I.-65 B	Dragline excavator, special light weight. steam operated, coal or oil firing.	

Specification No.	Description.	Remarks.
	POWER AND INDUSTRIAL PLANT—P. I.—*contd*	
‡ P. I.-74 D	Generators & motors, industrial type D. C. with class 'A' insulation	Saleable.
P. I.-75 C	Rotary Converters	Saleable.
‡2P. I.-76 D	Transformer, core type, oil immersed, self cooled for power and lighting	Saleable.
‡ P. I.-77 D	Alternators, salient and pole, revolving field, engine driven with class 'A' insulation	Saleable.
‡ P. I.-81 F	Switchboard, D. C., open type, when voltage does not exceed normally 650 volts	Saleable.
‡2P. I.-82 C	D. C. generators, 3 wire and static balancers, with class 'A' insulation	Saleable.
P. I.-95	Electrically operated, overhead travelling and traversing crane.	
P. I.-106 G	Steam operated road rollers, coal or wood fired ..	Saleable.
P. I.-114 D	Supply of plant and machinery and their erection at site. (Addendum No. 1 of November 1936) ..	Saleable.
P. I.-116 A	Supply of plant and machinery (without erection at site). (Addendum No. 1 of October 1936) ..	Saleable.
P. I.-130 A	Reciprocating steam engines for land purposes.	
P. I.-131 A	Steam turbine for land work.	
P. I.-132 A	Surface condensers.	
P. I.-133 A	Water tube boiler, steam raising plant and auxiliaries.	
P. I.-134 A	High tension alternators of the steam turbine type or of a similar high speed driven type.	
‡ P. I.-135 B	Motors, induction, with class 'A' insulation ..	Saleable
P. I.-136 A	Iron clad type starting and control panels for non-reversing A. C. motors upto 600 volts.	
P. I.-137 B	Gear sets, motor driven (A. C. or D. C.) for punkha pulling	Saleable.
P. I.-138	Electric storage Battery trucks	Saleable.
‡ P. I.-139 A	Crude oil engine driven road rollers.	
	TEXTILES—G.	
	Cotton.	
G/Tex/C-1	Cotton twine 5/10s.	
„ 6	Boymessenger's bag.	
„ 7	Sheets, ground, waterproof, canvas.	
„ 8	Paulins, cotton.	
„ 10 B	Bags, kit.	
„ 11 A	Bags, ration, waterproof.	
„ 13	Capes with hood, waterproof for Indians.	
„ 14 A	Capes and hood, waterproof for Burmans.	
„ 15 C	Newar, grey	Saleable.
„ 16 D	Putties, cotton, of all shades. (Corrigendum No. 1 of November 1936)	Saleable.

Specification No.		Description.	Remarks.
		TEXTILES—G—*contd.*	
		Cotton—contd.	
G/Tex/C	18 A	Cotton, wool, absorbent	Saleable.
,,	19 B	Long cloth, cotton, bleached	Saleable.
,,	21 E	Bags, dosuti, Postal	Saleable.
,,	24 D	Yarn, cotton, grey	Saleable.
,,	28 C	Dusters, cotton, hemmed..	Saleable.
,,	30 B	Sheeting unbleached for veterinary bandages.	
,,	33 E	Threads, cotton, sewing, coloured or white	Saleable.
,,	34	Muslin, bleached.	
,,	36 E	Bandage cloth (bleached)	Saleable.
,,	37 B	Cloth, alpaca, black	Saleable.
,,	39 C	Cloth, paramatta, black	Saleable.
,,	40 D	Twill, cotton, khaki. (Corrigendum No. 1 of January 1936)	Saleable.
,,	43 F	Lining cloths, cotton, satin and silicia cloth.	
,,	45 F	Canvas, cotton, khaki, proofed, for motor hoods ..	Saleable.
,,	48	Jaconet cloth, grey.	
,,	49 C	Waste, cotton, white, for axle box packing.	
,,	50	Waste, cotton, white, No. 1 B. for cleaning high class machinery.	
,,	51 A	Waste, cotton, coloured for cleaning machinery.	
,,	52	Waste, cotton, white or coloured, No. 2 for cleaning ordinary machinery.	
,,	53 G	Drill, cotton, dyed, extra heavy, heavy, medium and light qualities (shades other than khaki) ..	Saleable.
,,	54 F	Drill, cotton, bleached (heavy, medium and light qualities)	Saleable.
‡ ,,	55 D	Drill, cotton, khaki (heavy, medium and light qualities) (Add. No. 1 of January 1938)	Saleable.
,,	63	Webbing cotton, khaki.	
,,	64	Kullahs.	
,,	65 B	Dosuti, bleached	Saleable.
,,	68 C	Cloth, cotton, table, bleached. (Corrigendum No. 1 of May 1936)	Saleable.
,,	69 A	(*Cancelled*).	
,,	70 C	Sheets, cotton, bed, unbleached	Saleable.
,,	71	Lungis with headings of gold thread.	
,,	73 B	Lungis, ordinary.	
,,	75 B	Napkins, cotton, table, bleached	Saleable.
,,	78 B	Gabardine, cotton, blue black	Saleable.
,,	81	Pliable sheets of cotton canvas.	

Specification No.	Description.	Remarks.
	TEXTILES—G—*contd.*	
	Cotton—contd.	
G/Tex/C-83 B	Drill, cotton, grey	Saleable.
„ 85 C	Towels, hand, honeycomb, bleached	Saleable.
„ 87 B	Towels, bath, Turkish, bleached	Saleable.
„ 88 A	Tape, cotton, white, unbleached (for sealing of railway wagons).	
„ 89	(*Cancelled*).	
„ 91 A	Capes with hood, waterproof (Corr. No. 1 of May 1936).	
„ 92 B	Canvas, cotton, green, proofed	Saleable.
„ 93 A	Webbing, cotton, white and coloured.	
„ 94 B	Cloth, ticking, unbleached	Saleable.
„ 96 A	Coats, waterproof. (Corrigendum No. 1 of April 1936.)	
„ 98	(*Cancelled*).	
„ 99	Bags for carrying air mail.	
„ 101 D	Jerseys (banians), cotton, unbleached	Saleable.
„ 102	Cloth Bedford Cord, khaki.	
‡ „ 103 C	Sheets, bed, bleached and scoured	Saleable.
„ 105	Muslin white bleached (cambric).	
„ 108 A	Netting, cotton mosquito and sand fly and curtains, mosquito	Saleable.
„ 109 A	Stockings, cotton, dyed	Saleable.
„ 110	Kharooa cloth.	
„ 111 B	Canvas, cotton, white. (Corrigendum No. 1 of June 1936)	Saleable.
„ 112 A	Cotton, canvas, khaki, waterproofed for hoods (1st quality)	Saleable.
‡ „ 114 A	Wicks, cotton, flat, suitable for kerosene oil (other than signal lamp wicks) (Corr. No. 1 of May 1937)..	Saleable.
‡ „ 119 A	Cloth Holland cotton	Saleable.
„ 124 B	Waste, cotton, white, superior, for axle box packing	Saleable.
„ 125 B	Waterproof cape (ground sheet) with a detachable hood.	
‡ „ 127 B	Wicks, cotton, flat, suitable for castor oil (Corr. No. 1 of May 1937)	Saleable.
„ 129 B	Sponge cloth	Saleable.
„ 130 A	Twill, cotton, strippped (bleached)	Saleable.
„ 131 A	Cloth, cotton, waterproof, khaki (double fabric, interlined with rubber)	Saleable.
„ 132 B	Coir yarn, 2 ply	Saleable.
„ 139 B	(*Cancelled*).	
„ 140 B	Cloth, cotton, plain, grey..	Saleable
„ 141 B	Durries, cotton	Saleable.
„ 142 A	Gauze cotton absorbent, bleached	Saleable.

Sepcification No.	Description.	Remarks
	TEXTILES—G—*contd.*	
	Cotton—concld.	
G/Tex/C-143 A	Gauze, absorbent, bleached, for first field dressings (Corrigendum No. 1 of March 1936)	Saleable.
„ 144	Fringes, cotton, dyed.	
„ 145 A	Flannelette, cotton, for lining	Saleable.
‡ „ 146 A	Cloth, cotton, pugri, bleached or dyed. (Addendum No. 1 of September 1936 and Add. No. 2 of May 1937)	Saleable.
„ 149	Cotton, unginned (Kapas).	
„ 150 A	Sheets, cotton, bleached (linen finished)	Saleable.
„ 152	Cloth, cotton, punkha fringe, striped (red stripes on grey cotton ground).	
„ 153 A	Boiler cloth.	
„ 155	Cotton Nainsook bleached for polishing purposes ..	Saleable.
„ 156	Lining, ordinary (striped or bleached plain shirting).	
	Flax.	
G/Tex/F-1	Superintendent's camp bag, flax proofed, canvas, (single) with locking arrangements.	
„ 2	Superintendent's camp bags, flax proofed, canvas, (double) with locking arrangements.	
„ 4 B	Bags, nose.	
„ 5	Buckets, canvas, for ponies.	
„ 6 B	Planter's bag with locking arrangements (unproofed) and planter's bag (proofed) and with locking arrangements.	
„ 7 A	Canvas, flax.	
„ 8 E	Threads and twines, sewing, flax, for upholstery work (Corrigendum No. 1 of December 1935)	Saleable.
„ 34 B	Canvas, French	Saleable.
„ 36 A	Canvas, flax "C" grade. (Corrigendum No. 1 of November 1934)	Saleable.
„ 37 A	Canvas, white, unproofed, flax hemp or all hemp, for carriage cushions and seats.	
„ 38 A	Canvas, staying.	
„ 45	Dowlas, 54″ wide.	
„ 46 G	Paulins.	
„ 49 A	Tape, stay, linen	Saleable.
„ 50	Flax Mail Bags, proofed and unproofed.	
	Hemp.	
G/Tex/H-2	Cordage and line, hemp.	
„ 3	Hemp, twine, English and Country for P. and T. Department.	
„ 6	Cash bags, tat putties.	

Specification No.	Description.	Remarks.
	TEXTILES—G—*contd.*	
	Hemp—contd.	
G/Tex/H 7 A	Rope Manilla— (*i*) " Special ". (*ii*) " Ordinary "	Saleable.
	Jute.	
G/Tex/J-1 A	Jute twine, 2 ply, 3 ply, 4 ply, 5 ply and 6 ply.	
„ 12 B	Jute bags, unproofed for lineman tools.	
‡ „ 22 D	Jute mail bags, proofed and unproofed.	
„ 23 B	Jute paulins.	
„ 37 A	Jute bags, " B Twill ", 44″×26½″	Saleable.
„ 38	Gunny cloth for oil pressing.	
„ 39	Hessian cloth	Saleable.
	Miscellanoeus.	
G/Tex/Misc.-7	Lace, gold.	
„ 25	Braid, lace and fringes, gold.	
„ 27 D	Leather imitation cloth, for binding furniture, buttons and studs	Saleable.
‡ „ 28 E	Cloth cotton, long, domestic, jaconet and cheese and tapes cotton	Saleable.
„ 30	Carpets, Aixminister.	
„ 41 B	Matting, coir. (Corrigendum No. 1 of December 1936)	Saleable.
„ 42 A	Mat, door, pile, coir. (Corrigendum No. 1 of December 1936)	Saleable.
„ 43 B	Garments, rubber, waterproof.	
„ 44 A	Stuffiing, materials for mattresses, etc. (coir, kapok and cotton)	Saleable.
„ 45 A	Twines, cotton, jute, hemp and flax	Saleable.
„ 47 A	Linolium	Saleable.
„ 49	Ropes, coir	Saleable.
* „ 50	Carpets, hand made for Indian State Railways ..	Saleable.
	Tents and Tent Materials.	
‡ G/Tex/T-1 D	General specification for tent components.	
„ 2	Swiss cottage tent, square ended.	
‡ „ 3 A	Hill tent.	
„ 4	Tehsildar's tent.	
„ 5	Raoti tent, single fly.	
„ 20 A	Tent necessary.	
„ 21	Miniature swiss cottage tent (round ended).	
„ 22	Indian officers tent (double fly).	
„ 23	Kashmere tent, round ended.	
„ 24	Tents, square ended, forest officers' pattern.	
‡ „ 40	Servant's pals or shouldaries.	
„ 41 A	Light field service tents, 80 lbs.	

Specification No.	Description.	Remarks.
	TEXTILE—G—*contd.*	
	Tents and Tent Materials—contd.	
G/Tex/T-42 A	Field officer's kabul pals.	
" 43 A	General service tents.	
" 44	Sowar pal, square ended.	
" 45 A	Survey pal, square ended.	
‡ " 46 E	Half pal tents and full pal tents.	
" 47 A	Mountain battery tents.	
" 48	Sleeping pal.	
‡ " 49 A	Hudson Raoti tent.	
" 50 A ..	Shooting pal (or double fly sleeping pal) with bath-room.	
" 51 ..	Tents d'abre.	
" 52	Light bath tent.	
" 53	Staff officer's field service tent (rope ridge).	
" 54	Elliott pattern miniature swiss cottage tents.	
" 55	Swiss cottage tent (Police gazetted officers pattern).	
	Woollen.	
G/Tex/W-1	Wool, black and mixed, for blankets. (Addendum No. 1 of January 1935).	
" 3 B	Drawers, worsted	Saleable.
" 4 B	Caps, balaclava, worsted	Saleable.
" 5 D	Jackets, cardigan, woollen	Saleable.
" 6 E	Putties, woollen, khaki or blue	Saleable.
" 7 D	Cloth, bunting, woollen, white and coloured. (Addendum No. 1 of September 1935) and (Corrigendum No. 1 of December 1936)	Saleable.
" 8 B	(*Cancelled*).	
" 10 B	Cloth, Oxford, woollen, grey. (Addendum No. 1 of February 1935)	Saleable.
" 11 C	Flannel, silver grey	Saleable.
" 12 C	Mittens.	
" 13	Packing, woollen, yarn, for main motor and suspension bearings.	
" 16 B	Flannel, white for bandages. (Addendum No. 1 of January 1935.)	
" 18	Serge, blue, for shore and sea service. (Addendum No. 1 of January 1935.)	
" 19	(*Cancelled.*)	
" 20 C	Socks, worsted, blue grey. (Corrigendum No. 1 of December 1933)	Saleable.
" 21 D	Yarns, woollen	Saleable.

Specification No.	Description.	Remarks.
	TEXTILES—G—*concld.*	
	Woollen—contd.	
G/Tex/W-22 C	Serges, blue	Saleable.
‡ " 23 C	Broad cloth, woollen.	
" 24	Flannel, green, superior quality. (Addendum No. 1 of January 1935.)	
" 25	Serges of various shades for lining. (Addendum No. 1 of January 1935.)	
" 26	Flannel, Angola (union) grey. (Addendum No. 1 of January 1935).	
" 29	Blankets, saddle.	
‡ " 30 D	Blankets, woollen, scarlet (Corr. No. 1 of October 1937)	Saleable.
‡ " 31 D	Blankets, woollen, ordinary (Corr. No, 1 of October 1937)	Saleable.
" 32 D	Blanket cloth	Saleable.
" 34	Yarn similar to Illingsworths Thrums for packing bearing boxes of axle generators on electric freight locomotives.	
" 36 E	Jerseys, woollen	Saleable.
" 51 A	Cloth, woollen, twill, khaki	Saleable.
" 52 C.	Felt, woollen, white, grey or dyed	Saleable.
" 53	Numdahs, felt for saddles.	
" 55 A	Bannians, flannel, blue grey.	
" 56 D	Trimming worsted grey and white for use in oil cups on locomotives	Saleable.
" 63	Cloth, great coat, woollen. (Addendum No. 1 of January 1935.)	
" 64	Yarn, packing, worsted, white for packing bearings of electric locomotives.	

* Specifications framed during the year.

† Specifications framed and revised during the year.

‡ Specifications revised during the year

List of Indian Stores Department Special Specifications current at the end of the year 1937-38.

Specification No.	Description.
	BRIDGEWORK.
A-31	Standard mobilization steel hutting (M. W. services).
A-32	Steel and ironwork required by the Indian Public Works Department, Delhi, for the roofing of the Assembly, the Council of State and the Council of Princes' Chambers and Library of the New Legislative Buildings, Imperial Delhi.
A-36	Special construction quarters (portable hutting), for the Lloyd Barrage Project.
A-32	Aeroplane hanger.
	ENGINEER'S PLANT.
B-48	Portable steam pumping engine equipment and hose pipe for the Bikaner Canal, Punjab.
B-49	Crane, one 7-ton Scotch hand derrick for the Irrigation Department, Punjab.
B-51	Portable hand, 5-ton operated crane for 5′-6″ gauge railway track.
B-52	Scotch hand derrick crane constructed of steel.
B-54	*Cancelled.*
	BALLAST AND PERMANENT-WAY.
D-3	Light railway track, turntables and trucks, for military purposes.
	ROLLING STOCK.
E-30	Metre gauge steam rail motor with goods truck and goods trailer truck for the Sutlej Valley Project, Punjab Public Works Department.
E-31	Steam locomotives, 2′-0″ gauge, for the Sutlej Valley Project Bikaner Canal, Punjab Public Works Department.
E-40	Steam locomotives, 2′-0″ gauge, for the Sukkur Barrage Project.
	BUILDING.
G-Buildings 1A	Ordnance Tin Tents.
	CHEMICALS.
G-Chemicals 30	Acid, Sulphuric, Commercial 82 per cent., for the P. and T. Department.
	LAMPS AND LAMP FITTINGS.
G-Lamps-11	R. M. S. folding candle lantern for the P. and T. Department.
,, 16	Brass sealing lamp for the P. and T. Department.
,, 23	Table lamps, hanging lamp and hurricane lantern, for Director General, P. and T.
,, 24	Incandescent hurricane or hanging lantern, petrol pressure type, for the P. and T. Department.
	LEATHER AND RUBBER.
G-Leather-44	Waist, belt, leather, for P. W. D., Punjab.
,, 45	Meshas.
,, 47A	Boots, ankle (followers).

Specification No.	Description.
	LEATHER AND RUBBER—*concld.*
G-Leather-49	R. M. S. portfolio (G. pattern).
„ 50	Portfolio with lock, supervising officer (for P. and T. Department).
„ 51	R. M. S. Leather portfolio fitted with compartments for stamps seals, etc.
„ 52	Leather belts for G. I. P. Railway.
„ 53	Derby shoes, black or brown, for E. I. Railway (Crew staff).
„ 57	Leather goods for Police Department.
„ 58 A	Rubber pilot balloons for air observations for the Indian Meteorological Department.
„ 60	*Cancelled.*
„ 62	Lace, leather for belting for G. I. P. Railway.
	METALS.
G-Metals-47	Anti-friction metal, high grade and low grade, for the Military Engineer Services.
	MISCELLANEOUS.
G-Misc.-3 A	Kit boxes for sea service for M. E. S.
„ 4 A	Double security bond boxes and stamp boxes for the P. and T. Department.
„ 5	Despatch boxes for the Post Master General, Bombay.
„ 6 A	Safes for the D. G., P. and T. Department.
„ 7 A	Tin box for insurance seal types and tin box for stamp types for R. M. S.
„ 8 A	Leads seals for P. and T. Department
„ 9 A	Clocks and time-pieces for the P. and T. Department.
„ 10	Tin trays to hold Rs. 1,000 and Rs. 500 for the P. and T. Department.
„ 11 A	Badges, brass, for the P. and T. Department.
„ 12	*Cancelled.*
„ 13	Punching machine for the P. and T. Department.
„ 14	Spear head with brass bells for the P. and T. Department.
„ 16	Tin sheets for the P. and T. Department.
„ 17	Brush sweeping.
„ 18	Brush for painting letter boxes.
„ 19 A	Brush for cleaning stamps.
„ 20	Wooden blocks for label for the P. and T. Department.
„ 21 B	Enamelled sheet steel signboards, letter box plates, etc., for the P. and T. Department.
„ 22 A	*Cancelled.*
„ 23	Tin seal holder for the P. and T. Department.
„ 26 B	Crumps, adjustable proportional modules, for Irrigation Department, Punjab.

Specification No.	Description.
	MISCELLANEOUS—*concld.*
G-Misc.-33	Lead seals for the Controller of Currency.
" 45	Brass padlocks, box locks, drawer or almirah locks for iron safes and special locks, for the P. and T. Department.
" 46	Scales and weights for the P. and T. Department.
" 47	Fireclay for the N. W. Railway.
" 49	*Cancelled.*
" 50	Hose, India rubber, delivery, armoured, 2½″ bore for E. I. Railway.
" 60	Bedsteads, all metal, Army Hospital Pattern, Mark I.
" 65 A	Bicycles, Hercules single and double bar for Government Department.
	OILS, LUBRICANTS, ETC.
G-O.P. 43	Oils for use of Government Telegraph Department.
" 67 A	Wood Tar.
" 152	Oil, lubricating, crank chamber, high speed steam engine No. 2, for Bengal Nagpur Railway.
" 384	Grease, machine, for E. I. Railway.
	PAINTS AND PAINTER'S MATERIALS, ETC.
G-P. 301	Green paint, special, readymixed to E. B. Railway shade.
	TOOLS.
G-Tools-4 A	*Cancelled.*
	WATER WORKS STORES.
G-W.W. 31	Wrought iron or mild steel pipes for water for the Bikaner Canal.
" 51 A	89,000 c. ft. of rising main, special, sluice valves, air valves, etc., from Ramgarh to Jaipur for the Water Supply Scheme for Jaipur State, P. W. D.
" 52	Distribution piping, specials, valves and accessories for the water supply scheme for the Jaipur State, P. W. D.
" 53	Piping specials, valves and accessories for water supply, P. W. D., New Delhi.
	ELECTRICAL PLANT AND MATERIALS.
H-59	D. C. generator panel for Ambala.
H-74 B	Zinc, circular, special design, moulded for electric cells.
H-88	Belting for train lighting dynamos for Indian Railways.
H-89 B	*Cancelled.*
H-99	Withdrawn.
H-100	*Cancelled.*
H-101	Switchboard Ironclad A. C. Pillar type for G. I. P. Railway.
H-102	Sub-station Kiosk type for G. I. P. Railway.
H-104 A	Cables bazar, 400 volts, multicore, insulated single wire armoured for P. W. D. Electricity Branch, Punjab.

Specification No.	Description.
	ELECRTICAL PLANT AND MATERIALS—*contd.*
H-105	Insulators for P. W. D. Electricity Branch, Punjab.
H-106	Hot galvanizing for P. W. D. Elecrticity Branch, Punjab.
H-107	Electrodes for use on M. S. Bridgework for N. W. Railway.
H-108	Cables 230 volts twin core, insulated, single wire armoured domestic service leading-in cable.
H-109	Conductors, solid and stranded, copper and cadmium copper.
H-110	Inter-carriage electric couplers and cables for Broad Gauge Coachin Stock for N. W. Railway.
H-111	Cables, telephone, underground for P. W. D., Electricity Branch, Punjab.
H-112	Poles, tubular, steel, and its accessories for P. W. D., Electricity Branch, Punjab.
H-113 B	*Cancelled.*
H-114	Floodlight Projector Lanterns for the illumination of Railway yards.
H-115	Alkaline cells for use on Electro-Magnetic Strain gauge Testing apparatus.
H-116	Masts Floodlight.
	POWER AND INDUSTRIAL PLANT.
P. I. 26	Jolly boat.
P. I. 27	Heave-up boat for the Lloyd Barrage Works, Sukkur.
P. I. 28	Heave-up boat for the Lloyd Barrage Works, Sukkur.
P. I. 36	Electric hoists or winches.
P. I. 37	Dredgers (grab type).
P. I. 41	Pile driver and frame for the Sutlej Valley Project.
P. I. 46	Steam and exhaust piping for the Nalagarh Power House.
P. I. 47	Two 25 K. W. oil engine driven generating sets and switchboard for the British Infantry Barracks, Lahore.
P. I. 48	Turbo-alternator set, condensing plant, cranes, boiler economiser pumps, steel chimney, steam and exhaust pipe work, switchboard motor converter set, rotary converters, substation plant, extra high tension feeder cables and auxiliaries. for the Public Works Department, Delhi.
P. I. 50	Concrete mixers and prime movers, required for the Bikaner Canal, Sutlej Valley Project.
P. I. 51	Stone breaker plant and screens for the Nalagarh Quarries, Sutlej Valley Irrigation Project.
P. I. 52	Generating plant, transformers, switchgear, pump, and motors, for the Nalagarh Quarries Power Plant, Punjab Irrigation Department.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*contd.*
P. I. 53	Generating plant, transformers, switchgear, pump and motors, for the Ferozepore Division Power Plant, Punjab Irrigation Department.
P. I. 54	Concrete mixers with motors for the Sutlej Valley Project.
P. I. 55	One 53, 4 K. V. A. oil engine driven A. C. generating set with exciter for the Northern India Salt Revenue Department, Sambhar Lake.
P. I. 56	Switchgear for the Northern India Salt Revenue Department, Sambhar Lake.
P. I. 57	A. C. motor and control gear, for the Government of India Press, Simla.
P. I. 58	A. C. motors, control gear, main switchpanel, cable work and wiring for the experiment spinning plant and Technological laboratory of the Indian Central Cotton Committee, Bombay.
P. I. 59	Two 4 K. W. oil engine driven generating sets and switchboards for the Military Works Services, Nowshera Sub-District, Northern Command.
P. I. 63	Passenger, goods and service lifts, requirred by the P. W. D., for the New Legislative Buildings, Delhi.
P. I. 64	Passenger, goods and service lifts, required by the P. W. D. for Government House, Delhi.
P. I. 66	Oil engine alternator set, water cooling plant, crane, switchgear and cables for power station, transformer switchgear and cables for a sub-station for the Lloyd Barrage Works, Sukkur.
P. I. 70	Oil engine dynamo set, main fuel tank complete with pipework water cooling plant, crane, switchgear and cables for power station and motors, control gears and cables for the Press machinery for the Government Postal Press, Aligarh.
P. I. 78	Additional oil engine alternator sets, water cooling plant, transformers, switchgear and cables for the Power Station of the Lloyd Barrage Works, Sukkur.
P. I. 79	Concrete blockyard plant for the Lloyd Barrage Project, Sukkur.
P. I. 83	325 K. W. oil engine alternator sets, water cooling plant, oil fuel storage tank complete with pipework, crane transformer, switchgear, and connecting cables, induction motors, E. H. T. feeder cables and accessories for Power Station and Miscellaneous plant, for salt Mines, Khewra.
P. I. 84	Goods lifts for Postal Press, Aligarh.
P. I. 85	Electrically driven pumping machinery mounted on pontoons for dewatering coffer dams for the Lloyd Barrage Works, Sukkur.
P. I. 86	Oil engine driven power plant for the New Power Station, Municipal Board, Mussoorie.
P. I. 87	Plant for Hydro-electirc scheme, Municipal Board, Mussoorie.
P. I. 88	Oil engine driven power station for Jaipur.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*contd.*
P. I. 89	Pile driving plant mounted on pontoons for the Lloyd Barrage Works, Sukkur.
P. I. 90	Scotch derrick crane, motor driven, to lift 25 and 10 tons, on pontoons for the Lloyd Barrage Works, Sukkur.
P. I. 91	Steam driven paddle tugs for the Lloyd Barrage Works, Sukkur.
P. I. 92	Barrages for the Lloyd Barrage Works, Sukkur.
P. I. 93	Oil engine driven (diesel) Bucyrus dragline excavators, 30 B, for the Lloyd Barrage Works, Sukkur.
P. I. 94	Oil engine driven (diesel) Bucyrus dragline excavators, 50 B, for the Lloyd Barrage Works, Sukkur.
P. I. 96	Electrical plant for P. W. D., Punjab.
P. I. 97	30-B diesel engine driven Bucyrus dragline axcavators for the Lloyd Barrage Works, Sukkur.
P. I. 99	Steel barges of capacity up to 100 tons of stone for the Lloyd Barrage Works, Sukkur.
P. I. 100	50-B, diesel engine driven Bucyrus dragline excavator for the Lloyd Barrage Works, Sukkur.
P. I. 101	Sluice gates for the Panjnad Barrage on the river Sutlej, thirty three gates, clear width of opening 60′-0″, 18′-6″ deep for Punjab Public Works Department.
P. I. 102	Gates for the undersluices for the Weir across the river Damodar.
P. I. 103	250 K. W., 2,300 volts full diesel oil engine alternator sets for the P. W. D., Simla.
P. I. 104	One 600 K. W., 3,300 volts, oil engine alternator set, oil fuel service tanks, etc., for additional power station, Jaipur P. W. D.
P. I. 105	Steel barges of capacity up to 100 tons of stone for Lloyd Barrage Works, Sukkur.
P. I. 107	Three, 200 K. W., 400 volts water turbine alternator sets, etc., for the Sumera Hydro-Electric Pumping and Power Scheme for the P. W. D., United Provinces.
P. I. 108	Radial gates for the head and cross regulaters for main canal and branches of the Lloyd Barrage and Canal Construction, Sind.
P. I. 109	Sluice gates, vertical sliding and radical types for small branches, distributions and minors of the Lloyd Barrage and Canal Construction, Sind.
P. I. 115	Sea-going steam lighter for Forest Department, Port Blair.
P. I. 117	Pumping plant, oil engine driven, tube with turbine, for N. W. Railway.
P. I. 118	Pumping plant, oil engine driven, centrifugal, for N. W. Railway.
P. I. 119	Pumping plant, oil engine driven Air-Lift cum centrifugal, for N. W. Railway.
P. I. 123	Pumping plant, electrically-driven, Air-lift-*cum*-centrifugal, N. W. Railway.

Specification No.	Description.
	POWER AND INDUSTRIAL PLANT—*contd.*
P. I. 125	A. C. motor and control gear for driving pumping plant for N. W. Railway.
P. I. 126	Control gear for the control of induction motors, for N. W. Railway.
P. I. 127	Pumps, centrifugal, A. C. motor driven for N. W. Railway.
P. I. 129	Motor alternator set with testing transformer and induction regulator for the Government Test House, Alipore, Calcutta.
	TEXTILES.
G-Tex./C-4	Cotton canvas, brown for O. and R. Railway.
" 17 B	Capes with hoods, waterproof, for the Postal Department. (Corr. No. 1 of October 1936.)
" 25	File bundling sheet of blue drill for the P. and T. Department.
" 26 A	Khaki drill sacks, postman's, for the P. and T. Department.
" 27 B	Waterproof khaki drill, delivery bag, for the P. and T. Department.
" 29	Clothing materials for the use of the staff of the P. and T. Department.
" 32	Cape with hood, waterproof, for Bombay Police. (Corr. No. 1. of October 1936.)
" 72	Dosuti, grey, for Borstal Institute, Lahore.
" 74	Turbans, khaki, for G. I. P. Railway staff.
" 76	Dosuti, khaki, for N. W. Railway.
" 77	Dosuti, grey, for E. I. Railway.
" 79 B	Lungis, ordinary, for Sind Police.
" 84	Grey drill, unbleached, for Borstal Institute, Lahore.
" 86	Sheeting, grey, for Borstal Institute, Lahore.
" 97	Dosuti, grey (heavy quality) for Railways.
" 107	Flashes and belts for E. I. Railway.
" 113	Shorts and blouses, khaki, for G. I. P. Railway.
" 115	Red flags with letter P. W. D. for roads under repair.
" 116 C	Badge cloth, embroidered, C. and W., for N. W. Railway.
" 117	Ground sheets, waterproofed, for prisons, Burma, Bihar and Patna.
" 118	Long cloth, bleached, for Government Printing and Stationery Department, Burma.
" 120	Canvas cotton, black, for N. W. Railway.
" 121	Bags, waterproof, for clearance of outside letter boxes.
" 122	Long cloth, bleached, for overalls, for E. I. Railway.
" 126	Bags kit, canvas, cotton, white, for Madras Police.
" 128	Bags, dosuti, cotton, for the Opium Factory, Ghazipur.
" 147	Covers, slip, for mattresses for E. I. Railway.
" 148	Lace (tape), cotton, yellow, for Bombay City Police.

Specification No.	Description.
	TEXTILES—*contd.*
G/Tex./C-151 B	Cloth, cotton, Mazri, for Zhob Militia.
" 154 A	Canvas cotton, khaki, unproofed for the upper sides of carriage cushions for E. B. Railway.
G/Tex./F 48	Waterproof sheets for blankets for Assam Police.
G/Tex./J-33 A	Hand bags for R. M. S. sorters.
" 34	Canvas, jute, unproofed, for I. G., Police, Madras.
" 35	Felt, tarred, jute, for N. W. Railway.
G/Tex./Misc.-1	Waist and shoulder belts of red broad cloth for Postal Department.
‡ " 2 J	Summer uniforms for the E. I. and E. B. Railway staff. (Corr. No. 1 of April 1935).
‡ " 3 I	Winter uniforms for E. I. and E. B. Railway staff. (Corr. No. 1 of April 1937).
" 24	Clothing material for Government of India menial staff.
" 26 A	Belt with gold lace and with brass fastner for the N. W. Railway.
" 40	Gold lace for the uniforms of Government of India menial staff.
" 46 A	Uniforms for G. I. P. Railway staff.
‡ " 48 A	Uniform for Railway Police, Rajputana.
G/Tex./W-14 A	Broad cloth, dark blue, for Bombay Police. (Add. No. 1 of January 1935).
" 15	Serge, white, for Medical and Veterinary Department. (Add. No. 1 of January 1935.)
" 17 A	Great coats with capes for mounted and foot police, Sind.
" 28 B	*Cancelled.*
" 38 A	Great coats with capes for Salt and Excise Department, Sind.
" 39	Serge, khaki, for G. I. P. Railway. (Add. No. 1 of January 1935).
" 41	Serge, grey, for E. I. Railway. (Add. No. 1 of January 1935).
" 50	Drab mixture great coat cloth for I. G., Prisons, Bombay. (Add. No. 1 of January 1935).
" 57	Great coat cloth, khaki, for the Assam Police, 1, 2 and 4 Assam Rifles. (Add. No. 1 of January 1935).
" 58	Kambalies, woollen, for Bombay Forest Department.
" 60	Great coats, foot and mounted types, for the Railway Police, Rajputana.
" 61	Blue grey hosiery worsted yarn for the Jail Department, Burma.
" 62	Lohies, natural grey, for the P. and T. Department, Kashmir.
" 65	Buntings for R. I. M. Dockyard, Bombay. (Add. No. 1 of January 1935).
" 66	*Cancelled.*

‡ Specifications revised during the year.

APPENDIX XIII.

Statement showing the work done by Inspection Branch.

Value and tonnage of stores inspected and number of tests and analyses carried out.

(*Vide* paragraphs 52 and 56 of the Report.)

—	Value of stores inspected and charged on value.				Tonnage of stores inspected and charged on weight.				Number of tests and analyses carried out.			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Rs.	Rs.	Rs.	Rs.	Tons.	Tons.	Tons.	Tons.	Nos.	Nos.	Nos.	Nos.
1. Provincial Inspectorates (Calcutta, Bombay, Karachi, Upper India, Cawnpore and Madras).	5,25,02,067	6,53,54,815	5,84,79,755	7,26,51,227	52,718	67,541	62,731	64,060	..	..	..	..
2. Metallurgical Inspectorate, Tatanagar.	11,33,588	22,76,741	13,39,101	21,80,960	271,144	327,467	273,644	371,549	8,184	10,731	9,202	13,817
3. Government Test House, Alipore	..	..	..	..	..	..	..	..	8,413	8,329	9,026	9,085
Total ..	5,36,35,655	6,76,31,556	5,98,18,856	7,48,32,187	323,862	395,008	336,375	4,35,609	16,597	19,060	18,228	22,902
Deduct tests carried out for the Indian Stores Department.									5,163	5,342	5,686	6,115
Net Total ..									11,434	13,718	12,542	16,787

Note I.—For fees earned see Appendix XX.

Note II.—In addition to the items of work shown against the Metallurgical Inspectorate 60,457 coils of cables manufactured at the works of the Indian Cable Co. were inspected against 47,710 in 1936-37.

APPENDIX XIV.

Statement showing inspection work carried out for various authorities (material charged on value).

(*Vide* paragraphs 3, 45 and 52 of the Report.)

uthorities on whose behalf stores were inspected.	Calcutta Inspection Circle.				Bombay Inspection Circle.			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Stores purchased by other Departments which were only inspected by the Indian Stores Department.								
1. Central Government Departments, Civil	..	1,062	..	..	5,965	5,483	5,366	57,213
2. Central Government Departments, Defence	..	..	..	..	..	..	..	..
3. Railways, State-worked ..	78,46,552	1,23,52,850	53,58,867	75,84,171	2,10,555	7,78,722	4,81,886	1,29,928
4. Railways, Company-worked..	65,51,123	47,28,491	51,80,461	48,09,126	13,39,053	14,48,665	1,01,807	1,94,498
5. Railways worked by Indian States	1,70,191	80,200	1,52,061	1,04,089	74,179	20,022	96,044	19,204
Total Railway Administrations	1,45,67,866	1,71,61,541	1,06,91,389	1,24,97,386	16,23,787	22,47,409	6,79,737	3,43,630
6. Provincial Governments ..	2,33,443	2,24,334	1,08,706	39,445	2,584	205	48,341	59,753
7. *Quasi*-Public Bodies ..	..	17,445	..	3,456	9,545	..	..	..
8. Private concerns and Indian States	7,784	6,270	4,705	1,08,399	243	..	1,735	20,414
9. Foreign Governments and Public Bodies	..	..	..	..	..	..	..	..
10. Burma Railways ..	(*a*)	(*a*)	(*a*)	59,358	..	..	..	..
Total—Orders placed by other Departments and Inspected by the Indian Stores Department.	1,48,09,093	1,74,10,652	1,08,04,800	1,27,08,044	16,42,124	22,53,097	7,35,179	4,81,010

uthorities on whose behalf stores were inspected.	Karachi Inspection Circle.				Upper India Inspection Circle.				Cawnpore Inspection Branch.				Madras Inspection Branch.			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Central Government Departments, Civil	..	..	..	..	..	..	7,500	..	..	..	..	..	..	..	..	..
2. Central Government Departments, Defence	..	..	..	5,234	..	..	..	..	..	..	..	..	..	..	..	..
3. Railways, State-worked	12,269	..	68,802	3,610	..	350	..	200	..	2,645	..	..	..	..	..	..
4. Railways, Company-worked	..	..	..	589	..	..	..	..	..	..	..	..	..	..	..	..
5. Railways worked by Indian States	43,678	362	12,951	36,236	..	..	..	..	..	..	..	..	..	..	..	..
Total Railway Administrations	55,947	362	81,753	40,435	..	350	..	200	..	2,645	..	..	..	..	..	..
6. Provincial Governments	..	..	..	..	1,366	30,204	1,110	2,000	..	..	..	..	..	..	..	..
7. *Quasi*-Public Bodies	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8. Private concerns and Indian States	..	83,500	34,000	7,148	38,444	..	..	2,84,083	..	..	16,800	..	13,350	34,802	25,402	30,091
9. Foreign Governments and Public Bodies	..	..	..	..	..	..	..	..	3,814	5,699	5,320	2,760	..	..	..	..
10. Burma Railways	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total—Orders placed by other Departments and Inspected by the Indian Stores Department.	55,947	83,862	1,15,753	52,817	39,810	30,554	8,610	2,86,283	3,814	8,344	22,120	2,760	13,350	34,802	25,402	30,091

uthorities on whose behalf stores were inspected.	Total stores charged on value inspected by Provincial Inspectorates.				Metallurgical Inspectorate, Tatanagar.				Total stores inspect	
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-3
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
1. Central Government Departments, Civil	5,965	6,545	12,866	57,213	..	2,506	8,833	..	5,965	9,
2. Central Government Departments, Defence	..	..	..	5,234	103	69	..	2,917	103	
3. Railways, State-worked	80,69,376	1,31,34,567	59,09,555	77,17,909	..	..	..	..	80,69,376	1,31,34,
4. Railways, Company-worked	78,90,176	61,77,156	52,82,268	50,04,213	27,597	..	..	..	79,17,773	61,77
5. Railways worked by Indian States	2,88,048	1,00,584	2,61,056	1,59,529	..	..	..	..	2,88,048	1,00
Total Railway Administrations	1,62,47,600	1,94,12,307	1,14,52,879	1,28,81,651	27,597	..	..	..	1,62,75,197	1,94,12
6. Provincial Governments	2,37,393	2,54,743	1,58,157	1,01,198	44,856	4,82,130	13,959	4,565	2,82,249	7,36
7. *Quasi*-Public Bodies	9,545	17,445	..	3,456	..	..	..	..	9,545	17
8. Private concerns and Indian States	59,821	1,24,572	82,642	4,50,135	12,264	*—23,360	..	..	72,085	1,0
9. Foreign Governments and Public Bodies	3,814	5,699	5,320	2,760	..	..	..	..	3,814	
10. Burma Railways	..	..	..	59,358	..	..	..	..	..	..
Total—Orders placed by other Departments and Inspected by the Indian Stores Department.	1,65,64,138	1,98,21,311	1,17,11,864	1,35,61,005	84,820	4,61,345	22,792	7,482	1,66,48,958	2,02,8
The value of stores inspected against orders placed by the Indian Stores Department.	3,59,37,929	4,55,33,504	4,67,67,891	5,90,90,222	10,48,768	18,15,396	13,16,309	21,73,478	3,69,86,697	4,73,4
GRAND TOTAL ..	5,25,02,067	6,53,54,815	5,84,79,755	7,26,51,227	11,33,588	22,76,741	13,39,101	21,80,960	5,36,35,655	6,76,3

APPENDIX XV.

Statement showing inspection work carried out for various authorities which is charged on weight.

(*Vide* paragraphs 3, 45 and 52 of the Report.)

Authorities on whose behalf stores were inspected.	Calcutta Inspection Circle.				Bombay Inspection Circle.				Karachi Inspection Circle.			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1. Central Government Departments, Civil	..	..	..	..	..	..	..	..	..	..	..	..
2. Central Government Departments, Defence	..	..	..	..	..	..	..	..	..	..	..	..
3. Railways, State-worked	40,087	62,320	54,775	51,740	..	..	..	..	..	..	13	..
4. Railways, Company-worked	10,849	4,695	6,705	9,151	..	..	..	..	..	..	..	..
5. Railways worked by Indian States ..	313	88	..	710	2	..	..	..	..	..	..	1
Total Railway Administrations ..	51,249	67,103	61,480	61,601	2	..	..	..	..	..	13	1
6. Provincial Governments	404	..	66	8	..	..	..	..	..	..	..	..
7. *Quasi*-Public Bodies	..	..	30	1	..	..	..	..	..	..	..	..
8. Private concerns and Indian States ..	133	66	285	972	413	264	96	145	..	..	..	..
9. Foreign Governments and Public Bodies	517	108	70	89	..	..	..	..	..	..	..	..
10. Burma Railway	(*a*)	(*a*)	(*a*)	3	..	..	..	..	..	..	..	..
Total ..	52,303	67,277	61,931	62,674	415	264	96	145	..	..	13	1

Authorities on whose behalf stores were inspected.	Cawnpore Inspection Branch.				Total Provincial Inspectorates.				Metallurgical Inspectorate, Tatanagar.				Total tonnage of stores inspected and charged on weight.			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1. Central Government Departments, Civil	..	..	..	..	..	..	..	..	..	3,235	53	..	..	3,235	53	..
2. Central Government Departments, Defence	..	..	..	..	..	..	..	..	10	..	..	..	10	..	..	..
3. Railways, State-worked	..	..	691	1,240	40,087	62,320	55,479	52,980	79,116	72,263	62,563	43,574	1,19,203	1,34,583	1,18,042	96,554
4. Railways, Company-worked	..	..	..	..	10,849	4,695	6,705	9,151	14,874	20,978	30,378	27,790	25,723	25,673	37,083	36,941
5. Railways worked by Indian States ..	..	..	..	..	315	88	..	711	26	2,391	1,110	..	341	2,479	1,110	711
Total Railway Administrations ..	..	..	691	1,240	51,251	67,103	62,184	62,842	94,016	95,632	94,051	71,364	1,45,267	1,62,735	1,56,235	1,34,206
6. Provincial Governments	..	..	..	..	404	..	66	8	..	..	..	..	404	..	66	8
7. *Quasi*-Public Bodies	..	..	..	..	..	..	30	1	..	..	..	7,886	..	..	30	7,887
8. Private concerns and Indian States ..	..	..	..	..	546	330	381	1,117	1,77,118	2,28,600	1,79,540	2,92,299	1,77,664	2,28,930	1,79,921	2,93,416
9. Foreign Governments and Public Bodies	..	..	..	..	517	108	70	89	..	..	..	..	517	108	70	89
10. Burma Railway	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	3
Total ..	..	..	691	1,240	52,718	67,541	62,731	64,060	2,71,144	3,27,467	2,73,644	3,71,549	3,23,862	3,95,008	3,36,375	4,35,609

(*a*) Included under State-worked Railways.

APPENDIX XVI.

Statement showing the particulars of work done in each Inspectorate.

(*Vide* paragraphs 3 and 45 of the Report.)

Name of Circle. (1)	No. of orders received for Inspection. (2)				Amount of orders received for Inspection chargeable on value. (3)				Tonnage of material inspected on weight basis. (4)			
	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
	Nos.	Nos.	Nos.	Nos.	Rs.	Rs.	Rs.	Rs.	Tons.	Tons.	Tons.	Tons.
Calcutta Inspection Circle ..	26,095	28,660	29,860	32,667	3,44,93,823	4,34,18,904	6,14,46,243	5,17,24,544	52,303	67,277	61,931	62,674
Bombay Inspection Circle ..	11,998	14,913	15,762	17,786	88,73,516	1,29,95,685	1,14,01,409	1,30,18,453	415	264	96	145
Karachi Inspection Circle ..	6,782	7,908	8,278	10,343	57,71,606	66,61,438	64,96,546	93,12,409	..	..	13	1
Upper India Inspection Circle	4,083	5,680	5,703	5,732	44,30,409	58,98,770	54,13,174	54,30,634	..	..	..	..
Cawnpore Inspection Branch ..	2,848	3,136	2,967	3,270	15,88,673	22,78,349	17,36,625	29,83,819	..	..	691	1,240
Madras Inspection Branch ..	3,544	4,089	4,168	4,964	14,30,174	15,08,761	15,20,733	15,68,339	..	..	..	..
Total Provincial Inspectorates	55,350	64,386	66,738	74,762	5,65,88,201	7,27,61,907	8,80,14,730	8,40,38,198	52,718	67,541	62,731	64,060

APPENDIX XVII.

Statement showing the number of tests and analyses carried out for various authorities.

(*Vide* paragraphs 3, 52 and 56 of the Report.)

Authorities on whose behalf tests, analyses, etc., were carried out.	Metallurgical Inspectorate, Tatanagar.				Government Test House, Alipore.				Total numeber of tests and analyses carried out.			
	1934-35.	1935 36.	1936-37.	1937-38.	1934-35.	1935-36	1936-37.	1937-38.	1934-35.	1935-36.	1936-37.	1937-38.
For the Indian Stores Department	22	9	14	33	5,141	5,333	5,672	6,082	5,163	5,342	5,686	6,115
Outside authorities—												
1. Central Government, Civil	3	..	6	22	158	210	262	385	161	210	268	407
2. Central Government, Defence	1	..	..	..	403	223	405	304	404	223	405	304
3. Railways, State-worked	29	61	20	24	451	475	371	174	480	536	391	198
4. Railways, Company-worked	72	67	16	49	307	121	303	146	379	188	319	195
5. Railways worked by Indian States	2	..	4	..	47	70	47	16	49	70	51	16
Total Railway Administrations ..	103	128	40	73	805	666	721	336	908	794	761	409
6. Provincial Governments	4	1	1	2	322	253	244	199	326	254	245	201
7. *Quasi*-Public bodies	3	..	..	2	97	139	242	255	100	139	242	257
8. Private concerns and Indian States	8,048	10,593	9,141	13,685	1,487	1,505	1,480	1,524	9,535	12,098	10,621	15,209
Total ..	8,184	10,731	9,202	13,817	8,413	8,329	9,026	9,085	16,597	19.060	18,228	22,902

APPENDIX XVIII.

Statement showing the articles tested in the Government Test House, during the year 1937-38.

(*Vide* paragraphs 3 and 56 of the Report.)

Srial No.	Articles.	Serial No.	Articles.
1	Accessories Electrical.	39	Deposit.
2	Acid.	40	Dinamometer.
3	Aluminium foil.	41	Distemper wall paper.
4	Apparatus flash point.	42	Disinfectant.
5	Apparatus, oxygen.	43	Drillings.
6	Antimony.	44	Earth.
7	Asbestos steam jointing.	45	Extracts of chicken.
8	Asbestos sheet.	46	Fabrics. cotton.
9	Asphalt.	47	Fabrics, jute.
10	Barrels.	48	Fabrics, woollen.
11	Barytes.	49	Fans and Regulators.
12	Batteries.	50	Files of sorts and sizes.
13	Bauxite.	51	Fire extinguisher.
14	Belting.	52	Fittings electric.
15	Benzene.	53	Fittings A. V. B.
16	Blades.	54	Fountain pen.
17	Bitumen.	55	Fumigating mixture.
18	Bolts.	56	Gas acetylene.
19	Brass.	57	Glass.
20	Bricks.	58	Graphite.
21	Bucket.	59	Grease.
22	Cables.	60	Hammer, steel.
23	Calcium carbide.	61	Hinges, brass.
24	Cakes, vegetable.	62	Hooks, drawbar.
25	Candle wax.	63	Hoops, iron bailing.
26	Canvas.	64	Horn cheek.
27	Cells.	65	Hurricane Lantern.
28	Cement.	66	Hydrometer.
29	Chalk.	67	Ilmenite.
30	Chain.	68	Ingot.
31	Chemicals.	69	Insecticide.
32	Clay.	70	Insulator.
33	Coal.	71	Iron.
34	Coal Tar.	72	Jointing pressure.
35	Coke.	73	Knives.
36	Concrete.	74	Lamps electric.
37	Copper plates.	75	Lead.
38	Cordages, cotton, flax & jute.	76	Leather.

Serial No.	Articles.	Serial No.	Articles.
77	Lime.	116	Rosin.
78	Limestone.	117	Rubber.
79	Manganese ore.	118	Salt.
80	Manganese chloride.	119	Sand.
81	Manure.	120	Screw coupling.
82	Mattress, asbestos.	121	Scissors.
83	Metal, antifriction.	122	Seeds, castor.
84	Meter, house service.	123	Sheets, corrugated.
85	Meters, electrical.	124	Sheets, corrugated, asbestos.
86	Metal cleaning compound.	125	Sheets, aluminium.
87	Nibs.	126	Shellac.
88	Oil, creosote.	127	Silt.
89	Oil, fish.	128	Sleepers.
90	Oil, fuel.	129	Sludge.
91	Oil, kerosene.	130	Soap.
92	Oil, lubricating.	131	Soti food.
93	Oil seeds.	132	Soil.
94	Oil, transformer.	133	Spirit Methylated.
95	Oil, vegetable.	134	Steel.
96	Ore.	135	Sulphate of copper.
97	Oxygen cylinder gas.	136	Sugar of milk.
98	Paraffin.	137	Tallow.
99	Paper.	138	Tape, newar.
100	Packing, hemp, greased.	139	Tapes, electric.
101	Packing, grease.	140	Threads.
102	Paints and pigments.	141	Thermometer.
103	Paints remover.	142	Tiles.
104	Petrol.	143	Tin.
105	Pipes, asbestos cement.	144	Turpentine.
106	Pipes, hose, canvas.	145	Twines.
107	Pipes, non-metallic.	146	Valve sluice.
108	Pipes, stoneware.	147	Varnish.
109	Pitch.	148	Water.
110	Polishes, French.	149	Wax.
111	Polishes, leather.	150	Weight, Bazaar.
112	Polishes, metal.	151	Whisky.
113	Pyroxide mixture.	152	Wires.
114	Ropes, metallic.	153	Wood preservative.
115	Ropes, non-metallic.	154	Zinc.

APPENDIX XIX.

(*Vide* paragraph 66 of the Report.)

List of Testing plant and Apparatus installed in the Government Test House, Alipore, Calcutta.

A.—ENGINEERING LABORATORIES.

1. One 100-ton Buckton horizontal testing machine, hydraulically operated for tensile, compression and transverse tests.
2. One 10-ton Avery testing machine for tensile, compression and transverse tests.
3. One 10,000 lbs. Avery universal testing machine for tensile, compression, transverse and torsion tests.
4. One Ewing extensometer complete with marking-off jig for test-pieces.
5. One Buckton double sided cold and temper bend testing machine.
6. One 120-foot lbs. Avery Izod type impact testing machine for carrying out notched-bar tests on metals.
7. One Avery fatigue testing machine.
8. One 5-foot ton Avery impact testing machine for carrying out impact tests on railway couplings and draw gears.
9. One 0-50 ton Amsler Standardizing box for calibrating testing machines.
10. One 20-ton dynamometer (Salters).
11. One Avery 10 cwt. platform weighing machine.
12. One microscope.
13. One Rawdon hydraulic testing machine for testing stoneware and other pipes up to 18″ in diameter and 3′-0″ in length.
14. One Bailey hydraulic testing machine for carrying out porosity and pressure tests on cocks, valves , etc.
15. One " Compactum " hydraulic pressure test pump, 2,000 lbs. per sq. inch capacity, for general hydraulic pressure tests.
16. One Vickers pyramidal diamond hardness testing machine.
17. One 12″ Newal measuring machine graduated to read up to 1/1,00,000 inch.
18. One Thurston oil testing machine for testing oils under practical conditions of use.
19. One Brotherhood pressure gauge testing apparatus, 0-6,000 lbs. per sq. inch.
20. One Brotherhood vacuum gauge testing apparatus.
21. One Budenberg dead weight pressure gauge testing apparatus suitable for pressures of 0-2,000 lbs. per sq. inch.
22. One Budenberg pressure gauge testing apparatus suitable for pressures of 0 to 5 tons per sq. inch.

A.—ENGINEERING LABORATORIES—*contd.*

23. One vacuum gauge testing apparatus with mercury column.
24. One set of vacuum brake cylinders from 12″ to 24″ for testing vacuum brake fittings.
25. One Van Valve testing apparatus.
26. One Ball & Release Valve testing apparatus.
27. Apparatus for testing vacuum brake hose pipes.
28. One stretch testing machine for testing I. R. rolling and joint rings.
29. One stroke testing machine for carrying out abrasion tests on vacuum brake piston rods and gland packing rings.
30. Herbert automatic file testing machine.
31. Amsler torsion testing machine for testing wires and rods up to 1/4″ diameter.
32. One chemical balance.
33. Hoke's precision gauge blocks for checking inspection and other gauges.
34. One hydraulic accummulator set suitable for pressures of 0-10 cwts. per sq. inch.
35. Apparatus for testing gauges under hydraulic pressures up to 2,000 lbs. per sq. inch.
36. Apparatus for carrying out porosity test on porcelain insulators.
37. One electrically heated oil bath for carrying out Brinell hardness tests at elevated temperatures.
38. One gas heated air oven for carrying out compression tests at elevated temperatures.

B.—ROAD METAL LABORATORY.

1. One Deval type 4 cylinder attrition testing machine.
2. One ball mill.
3. One Dorry type abrasion testing machine.
4. One gas heated air oven.

C.—WORKSHOP.

1. One motor-driven 6″ centres S. S. and S. C. heavy duty Buckton lathe.
2. One 4″ centres S. S. and S. C. Halbrook lathe.
3. One Buckton test-piece preparing machine for shaping flat test-pieces for tensile test.
4. One Butler shaping and slotting machine.
5. One polishing machine for preparing specimens for micro-examination.

C.—WORKSHOP—*contd.*

6. One Smith & Coventry sensitive drilling machine.
7. One band saw.
8. One power hack saw.
9. One Emery grinder.
10. One grindstone—treadle driven.
11. One twist drill grinder and shaper.
12. One portable forge.
13. Anvils.
14. Vices, etc.

D.—TEXTILE LABORATORY.

1. One Goodbrand lea tester—0·500 lbs.
2. One Goodbrand yarn testing machine, 0·5 lbs.
3. One Dronsfield warp reel.
4. One Goodbrand twist tester.
5. One Goodbrand power driven cloth testing machine, 0·1,000 lbs. (in the air-conditioned room).
6. One Avery Vertical type cloth testing machine, 0·1,200 lbs.
7. Three Casartelli Microscope Cloth Counting glasses.
8. One Goodbrand electrically-heated conditioning apparatus.
9. One Goodbrand yarn examining machine.
10. One Louis Schopper yarn examining machine.
11. Two Knowles yarn balances.
12. One Standard Sunlight Fade-o-meter (Atlas Electric Devices Co., Ltd.).
13. One spray testing apparatus.
14. One apparatus for carrying out water-proofing test under friction.

E.—CEMENT AND LIME TESTING LABORATORY.

1. Two Adie tensile testing machines.
2. Nine Vicat's setting time apparatus.
3. Twenty two Le Chatelier soundness testing apparatus.
4. One Ro. Tap sieving machine.
5. One thermograph.
6. One dry and wet bulb thermomete
7. One setting time clock.
8. Eleven maturing tanks.
9. Three damp boxes.
10. Two hundred and eighty eight British Standard moulds for making briquettes.
11. Nine balances with weight boxes.
12. One damp chamber for setting time tests.
13. Five marble slabs for gauging.
14. One set British Standard sieves of sizes.

E.—CEMENT AND LIME TESTING LABORATORY.—*contd.*

15. One lime slaking apparatus.
16. Thirty six C. I. moulds for compression test cubes.
17. One slump test apparatus.
18. G. I. & E. I. trays, bowls, etc.
19. Two metal cans for grading tests.
20. One surki grinding mill.
21. One sieve shaker.
22. One edge runner mill.
23. One high temperature electric furnace with a Cambridge regulator suitable for heating to any temperature up to 1,400°C.

F.—ELECTRICAL LABORATORIES.

1. One Weston A. C. & D. C. Ammeter, Model—370, No. 4320, range 0-5-10 amps.
2. One Weston A. C. & D. C. Ammeter, Model—711, No. 4320, range 0-5-10 amps.
3. One Elliot A. C. & D. C. Ammeter No. 28510—Range 0-600 amps.
4. One Elliot D. C. Ammeter No. 133859 with shunts.
5. One Weston A. C. & D. C. Ammeter, Model 370, No. 4076, range 0-1-2 amps.
6. One Weston D. C. Ammeter, Model No. 1, No. 45390, range 0-15 amps.
7. One Weston A. C. Ammeter, Model 155, No. 59920, range 0-1-2 amps.
8. One Weston A. C. Ammeter, Model 155, No. 60582, range 0-1-2 amps.
9. One Weston A. C. Ammeter, Model 155, No. 49749, range 0-1-2 amps.
10. One Weston D. C. Ammeter, Model 1, No. 43898, range 0-1 amp.
11. One Weston D. C. Milliammeter, Model 45, No. 38318, range 0-150 milliamps.
12. Two Eston current transformers—1200/5 amps.
13. One Weston A. C. & D. C. milliammeter, Model 370, No. 4378, range 0-300 milliamps.
14. One Siemens Elliott D.C. milliammeter No. D.-31811, range 0-50 milliamps.
15. One Weston D. C. milliammeter, range 0-200 milliamps.
16. One Weston D. C. milliammeter, Model 280, range 0-5 milliamps.
17. One Weston A. C. & D. C. voltmeter, Model 341, No. 5662, range 0-300-600 volts.
18. One Weston D. C. voltmeter, Model 45, No. 18065, range 0-150 volts.
19. One Weston D. C. voltmeter, Model 45, No. 38107, range 0-3-15 volts.

F.—ELECTRICAL LABORATORIES—*contd.*

20. One Elliott D. C. voltmeter, No. 134575, range 0-600 volts.
21. Two Weston potential transformers, 3,300 & 6,600/110 volts.
22. One Weston D. C. voltmeter, Model 1, No. 50643, range 0-3 volts.
23. One Elliott A. C. & D. C. voltmeter No. 28465, range 0-150-300-600 volts.
24. One Everett Edgcumbe electrostatic voltmeter, range 0-3000 and 12,000 volts.
25. One Weston cell-testing voltmeter, 0-3 volts.
26. One Weston D.C. voltmeter, Model 1, No. 44162, 0-3 volts.
27. One Weston A. C. & D. C. voltmeter, Model 341, No. 6930, range 0-150-300 volts.
28. One Weston D. C. voltmeter, Model 1, No. 44521, range 0-75-150-300-600 volts.
29. One Siemens and Halske combined ammeter and voltmeter with 4 shunts.
30. One Weston A. C. & D. C. voltmeter, Model 341, No. 8969, range 0-150-300 volts.
31. One Weston Model 412 thermo-couple type multi-range voltmeter.
32. One Weston A. C. & D. C. voltmeter, Model 341.
33. One Siemens thermo-voltmeter No. A. 12538, ranges 0-7·5-15-30 volts.
34. One Weston A. C. & D. C. single-phase wattmeter, Model 310, No. 3382, ranges 0-2 amps. and 0-75-150 volts.
35. One Weston A. C. & D. C. polyphase wattmeter, Model 329, No. 907, ranges 0-5-10 amps. and 0-75-150 volts.
36. One Weston A. C. & D. C. single-phase wattmeter, Model 310, No. 8393, ranges 0-5-10 amps. and 0-100-200 volts.
37. One Weston A. C. & D. C. single-phase wattmeter, Model 432, No. 1725, ranges 0-1-2 amps. and 0-150-300 volts.
38. One Weston A. C. & D. C. single-phase wattmeter, Model 432, No. 3639, ranges 0-1-2-amps. and 0-150-300 volts.
39. One Weston A. C. & D. C. wattmeter, Model 310, No. 9318, ranges 0-5-10 amps. and 0-62·5-125-250 volts.
40. One Frequency Indicator No. 1142, range 43—62 cycles.
41. One' Meg ' Insulation Tester No. 155489, range—100 megohms.
42. Two 3″ Short & Mason anemometer.
43. One 3″ Lawrence & Mayo anemometer.
44. Two 4″ Short & Mason anemometer.
45. One 6″ Lawrence & Mayo anemometer.
46. One Naldar Brothers' ohmmeter No. 0764, range 0-100 megohms.
47. One Baird & Tatlock Wheatstone Bridge.

F.—ELECTRICAL LABORATORIES—*concld.*

48. One Siemen's earth testing set.
49. One Kelvin's Double Bridge.
50. One Siemen's phase shifting transformer.
51. One Siemen's step-less current regulator.
52. One Siemen's potential transformer, 220/10—25 volts.
53. One Muirhead D. C. potentiometer complete with Weston Cadmium standard cell, shunts & multiplier.
54. One Elliott Brothers Wheatstone Bridge No. 6353.
55. One high sensitivity galvanometer by Cambridge Scientific Instrument Co.
56. One Tinsley cable-testing set with galvanometer.
57. One standard 1 megohm resistance box.
58. One 80 ampere-hour capacity 270 volt stationary battery consisting of 135 cells.
59. One transformer oil testing spark gap.
60. One 4½″ Biram's high-speed anemometer.
61. One Everett Edgecumbe standard photometer bench.
62. One Everett Edgecumbe cube photometer for spherical candle power test on electric lamps.
63. One 50″ photometer cube and stand.
64. One Lummer-Brodhum type and one Simmance-Abady Flicker type photometer head.
65. One torsion testing apparatus for testing the adhesion of electric lamp caps.
66. One dynamometer type double range recording voltmeter.
67. Six incandescent electric lamp test racks complete with control panels and accessories.
68. One Philips photo-electric spherical photometer.
69. One Facit electric calculating machine.
70. One travelling microscope with 2″ and 6″ objectives.
71. One cathetometer.
72. Three 10 KVA 225 to 286 volts single-phase 50 cycle multitapping transformers with special plug switch board and control panel.
73. One 10 KVA motor alternator set.
74. One 18 KVA motor alternator set.
75. One 10 KVA 90 kilovolts Ferranti testing transformer.
76. One 8 amp. 35 volts battery charging motor generator set.
77. One storage battery testing equipment.
78. One General Radio capacity bridge, precision condenser, decade capacity box, audio oscillator for capacity measurements.

G.—I. C. ENGINE LABORATORY.

1. One Morris Industrial Engine, 10/20 H.P., suitably modified for running under strictly controlled operating conditions.
2. One Lister Diesel Engine, 8 H.P., with test accessories.
3. One electrical dynamometer.
4. Co-operative Fuel Research Engine for determination of octane number of aviation spirit together with diesel fuel conversion equipment.
5. One Lister house lighting set with 1·5 k.w. D. C. generator.
6. One general radio strobotac.

H.—CHEMICAL LABORATORIES.

1. Two gas compressors.
2. One water pump.
3. One exhaust unit.
4. One centrifuge, electric.
5. One centrifuge, hand operated.
6. Two spraying plants for paints, etc.
7. One set of spray gun and accessories for above.
8. Three end runner mills for paints.
9. One paint grinding mill.
10. Three vortex mixers for paints.
11. Two triple roll mills for paints.
12. One double roll mill for paints.
13. One single roll mill for paints.
14. One ball mill for varnishes and lacquers.
15. One 4 H.P. motor and shafting arrangements for operating above paint mills, etc.
16. One pickling tank for steel panels.
17. Three tanks for under-water immersion tests for paint panels.
18. One set of steel board for spreading power test on paints (408 sq. ft. area).
19. Eleven exposure test fences for paints, varnishes, etc.
20. One steel painting rack.
21. One Weather-o-meter, complete with accessories.
22. Two gas muffle furnaces (ordinary).
23. Two gas muffle furnaces for glass manufacture.
24. One air compressor and reservoir for above glass making furnaces.
25. One Carius bomb furnace.
26. One compressed oxygen furnace.
27. Three gas combustion furnaces with accessories.
28. Two electric combustion furnaces with accessories.
29. Two electric muffle furnaces.
30. Three distilled water stills.

H.—CHEMICAL LABORATORIES—*contd.*

31. One combined still and steam oven set.
32. Three sand baths with burners.
33. Six air ovens, ordinary.
34. Two air ovens, electric.
35. One electric incubator.
36. One air oven for the determination of moisture in shellac.
37. One oil oven.
38. One steam oven, ordinary.
39. Fourteen water baths, ordinary.
40. Two water baths, electric.
41. One hot plate, gas heated.
42. One hot plate, electric.
43. One Soxhlet extracting set, gas heated-12 extractors.
44. Two sets of Soxhlet extraction apparatus, complete with electric water baths.
45. One washerman's iron, ordinary.
46. One washerman's iron, electric.
47. Two Cambridge & Paul thermo-couple type pyrometers.
48. One Cambridge & Paul optical pyrometer (polarising type).
49. Three Mahler-Cook bomb calorimeters, complete with accessories.
50. Two spare bombs for above.
51. One Nalder Bros. volt-ammeter testing set (600 volts and 600 amperes).
52. One ammeter, 30 amperes.
53. One voltmeter for battery testing, 6 volts.
54. Three storage batteries, 6 volts.
55. One storage battery, 12 volts.
56. Nine gas cylinders (oxygen, carbon dioxide and nitrogen).
57. Two gas holders.
58. One Orsat's gas analysis apparatus.
59. One Haldane's gas analysis apparatus.
60. One Hempel's gas analysis apparatus.
61. One desiccating chamber.
62. Seventeen chemical balances, complete with weight boxes.
63. Three physical balances, complete with weight boxes.
64. One Berenger's balance.
65. Three Westphal balances.
66. One weighing scale.
67. One platinum resistance thermometer.
68. One Klett Bio-colorimeter.
69. Three microscopes.
70. One shellac grinder.
71. One electrometer (pH. meter).
72. One Helige non-fade comparator (for pH. determination.)

H.—CHEMICAL LABORATORIES—*contd.*

73. One sampling machine.
74. One dolly making machine for dry cell manufacture.
75. One hand punch press with two cap moulds for dry cells.
76. One capping machine for dry cells.
77. One shaking machine.
78. One mechanical agate mortar.
79. One mercury arc lamp.
80. One streamline filter.
81. One Collin's calcimeter.
82. One vacuum pump.
83. Seven stop watches.
84. One penetrometer.
85. One ductility testing apparatus for asphalts.
86. One apparatus for determination of volatility of asphalts.
87. One B. R. T. A. tar viscometer.
88. Two Hutchinson's tar testers.
89. Three ring and ball softening point apparatus.
90. One apparatus for testing carbide.
91. One apparatus for testing flexibility and adhesive power of varnishes.
92. One apparatus for scratch test of cellulose lacquer and varnish films.
93. One Fortin's barometer.
94. One Novita oxygen reviving apparatus.
95. One set of Puretha gas masks.
96. Two laboratory turbines and rotating stands for platinum electrodes.
97. Two foot bellows.
98. One glass cutting machine.
99. Two basins, platinum.
100. Four crucibles, platinum, 45 c.c., with lids.
101. Two crucibles, platinum, 50 c.c. with lids.
102. Seventeen crucibles, platinum, 30 c.c. without lids.
103. Eleven crucibles, platinum, 30 c.c., with lids.
104. Four crucibles, platinum, 10 c.c. without lids.
105. One crucible, platinum, 5 c.c. without lid.
106. One crucible, platinum, 5 c.c. with lid.
107. Two crucibles, platinum, 5 c.c. with lids (Smith).
108. Fourteen pairs of tongs, platinum tipped, for platinum crucibles.
109. One crucible, platinum, flat without lid, for coal testing.
110. One pair of electrodes, platinum, ordinary.

H.—CHEMICAL LABORATORIES—*concld.*

111. Two pairs of electrodes, platinum, rotating type.
112. Twelve platinum jockey lids for crucibles.
113. Three platinum lids, flat, for crucibles.
114. One platinum contact star.
115. Six platinum triangles.
116. One silver crucible.

I.—OIL LABORATORY.

1. One air oven.
2. Seven Chemical balances, complete with weight boxes.
3. One Reid vapour pressure bomb provided with air-chamber and copper bath.
4. One boiler with pressure gauge.
5. One circular brass bath with stand.
6. Three Conradson carbon residue apparatus.
7. One copper oven for determination of asphalt, complete with gear and pulley.
8. One colorimeter (Dubosq).
9. One condenser with metal jacket and stand.
10. Three cloud and pour test apparatus for single test.
11. One cloud and pour test apparatus for six tests.
12. Three distillation apparatus for gasoline.
13. Two distillation apparatus with metal condenser for kerosene.
14. One Ensign safe light lamp.
15. One Herschel emulsifier, motor driven.
16. One I. P. T. demulsification apparatus.
17. Eight flash point apparatus (Pensky-Martens).
18. Two flash point apparatus (Abel).
19. Two flash point apparatus (Abel Pensky).
20. One foot Blower.
21. Two carriage lamps, square.
22. One sodium lamp, complete with stand.
23. One Deeley friction testing machine.
24. Two standard spring type gauges, Bourdon.
25. One hot plate.
26. Two I. P. T. setting paint apparatus.
27. Eight stop watches.
28. One I. P. T. sludge testing apparatus, complete with a set of six manometers, blower and motor with worm gear and iron base.
29. One apparatus for sulphur determination of gasoline.
30. One Lovibond Tintometer fitted with an 18 in. cell complete with standard glasses.

I.—OIL LABORATORY—*contd.*

31. One Archbutt apparatus for the determination of volatility of oils.
32. Nine Redwood viscometers, No. 1.
33. Two Redwood viscometers No. 1, with NPL certificate.
34. One Redwood viscometer, Admiralty type.
35. One Mitchell viscometer.
36. U-tube vicometers, downward flow No. 1.
    - ,, ,, ,, ,, No. 2.
    - ,, ,, ,, ,, No. 3.
    - ,, ,, ,, ,, No. 4.
    - ,, ,, upward flow No. 3.
    - ,, ,, ,, ,, No. 4.
37. One water-bath, ordinary.
38. Three water baths for use with Redwood viscometers.
39. One still.
40. One water bath for saponification value.
41. One lead bath for determination of coke number.
42. One heat test apparatus for grease.
43. Two apparatus for production of solid carbon dioxide.
44. One apparatus for volatility test for transformer and switch oils.
45. One lamp and burner for testing long time burning oil, Welch lamp No. H. S. 68 fitted with Welch burner, etc.
46. One refrigerator box for cold test of insulating oils according to B. S. Specification.
47. One Beck's luminous magnifier.
48. Two smoke point lamps.

I.—OIL LABORATORY—*concld.*

49. One shaking apparatus.
50. One electrically heated copper water-bath.
51. One apparatus for Air Ministry oxidation test.
52. One Parr sulphur bomb.
53. One ubbelohde drop point apparatus.
54. Nine Hinks' single wick table lamps.
55. Three I. P. T. burning test lamps.
56. One Dean and Stark's apparatus for determination of water.
57. One apparatus for melting point of paraffin wax.

K.—OPTICAL LABORATORY.

1. One Guild trichromatic colorimeter, complete with accessories.
2. One spectrometer with accessories.
3. One Adam Hilger quartz spectrograph complete with accessories.
4. One polariscope, Schimdt Haensch Lippick's model with accessories.
5. One Parr Turbidimeter.
6. One Carl Zeiss Abbe Refractometer.
7. One Butyro Refractometer complete with hot water circulation apparatus.
8. One Zeiss Ikon Ideal Camera, complete with accessories.

L.—AIR CONDITIONED ROOM.

1. One air conditioned plant to maintain 70% relative humidity and 80°F temperature.
2. One dry cell testing rack with automatic testing device for accelerated tests.

APPENDIX XX.

Income and Expenditure Account of the Indian Stores Department for the years 1934-35, 1935-36, 1936-37 and 1937-38. (Vide *paragraphs 8 and 74 of the Report.*)

Particulars.	Amount.											
	1934-35.			1935-36.			1936-37.			1937-38.		
	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.	Commercial.	Non-Commercial.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. By 1% purchase fees ..	4,39,566	..	4,39,566	5,55,071	..	5,55,071	5,05,689	..	5,05,689	6,83,981	..	6,83,981
2. By 1% inspection fees ..	3,61,831	..	3,61,831	4,73,489	..	4,73,489	4,80,842	..	4,80,842	6,12,637	..	6,12,637
3. By recoveries on account of fees for tests, inspections, etc., made from Government Departments, Railways, private firms and individuals	5,79,028	97,079	6,76,107	6,92,506	85,612	7,78,118	5,30,601	90,010	6,20,611	6,32,134	79,759	7,11,893
4. By miscellaneous receipts ..	46,175	227	46,402	47,821	514	48,335	54,713	353	55,066	60,012	1,655	61,667
*5. By charges for tests, etc., adjusted between commercial and non-commercial branches of the Department ..	(a) 2,775	(a) 1,01,078	..	(a) 8,074	(a) 1,14,419	..	(a) 1,811	(a) 1,27,912	..	(a) 728	(a) 1,31,514	..
Total receipts ..	14,29,375	1,98,384	15,23,906	17,76,961	2,00,545	18,55,013	15,73,656	2,18,275	16,62,208	19,89,492	2,12,928	20,70,178
1. Pay of Officers	5,77,429	1,17,318	6,94,747	6,12,322	1,34,412	7,46,734	6,04,705	1,32,740	7,37,445	6,28,737	1,38,016	7,66,753
2. Pay of Establishment ..	5,77,984	1,72,135	7,50,119	6,17,006	1,84,301	8,01,307	6,47,221	1,93,326	8,40,547	6,65,303	1,98,727	8,64,030
3. Allowances	1,58,489	21,196	1,79,685	1,65,371	24,711	1,90,082	1,65,596	24,744	1,90,340	1,73,114	25,868	1,98,982
4. Grants-in-aid	..	..	..	..	..	..	..	..	..	..	..	..
5. *Supplies and Services*—												
(c) 6. Contingencies—												
(a) Expenditure in India ..	61,368	30,655	92,023	76,354	24,075	1,00,429	65,839	20,676	86,515	1,93,841	63,706	2,57,547
Deduct amount treated as capital expenditure ..	1,431	16,498	17,929	870	10,996	11,866	2,026	695	2,721	7,278	3,612	10,890
Total ..	59,937	14,157	74,094	75,484	13,079	88,563	63,813	19,981	83,794	1,86,563	60,094	2,46,657
(b) Expenditure in England—												
(i) On stores	16	176	192	..	9,639	9,639	722	409	1,131	4,433	506	4,939
(ii) On inspections on behalf of non-commercial civil Deptts. of the Central Government	240	..	240	573	..	573	3,727	..	3,727	905	..	905
Total contingencies (excluding amount treated as capital expenditure)	60,193	14,333	74,526	76,057	22,718	98,775	68,262	20,390	88,652	1,91,901	60,600	2,52,501
(c) 6. Contingencies	78,306	23,655	1,01,961	77,370	24,433	1,01,803	84,281	26,196	1,10,477	..	..	..
Deduct amount treated as capital expenditure ..	..	..	..	..	..	..	1,325	..	1,325	..	..	..
7. Works (including petty constructions and repairs) ..	7,659	5,562	13,221	5,193	2,293	7,486	4,878	2,296	7,174	5,311	2,448	7,759
Deduct amount treated as capital expenditure ..	582	..	582	320	..	320	..	..	..	110	..	110
Total ..	7,077	5,562	12,639	4,873	2,293	7,166	4,878	2,296	7,174	5,201	2,448	7,649
8. Loss or gain by exchange (included with the cost of stores in the Profit and Loss Account)	—46	..	—46	..	—16	—16	—4	..	—4	—23	..	—23
9. Total direct expenditure charged to Indian grant (excluding expenditure in England)	14,61,189	3,70,521	18,31,710	15,53,616	3,94,209	19,47,825	15,72,516	3,99,978	19,72,494	16,66,283	4,28,765	20,95,048
Deduct amount treated as capital expenditure and loss or gain by Exchange	1,967	16,498	18,465	1,190	10,980	12,170	3,347	695	4,042	7,365	3,612	10,977
10. Net direct Expenditure ..	14,59,222	3,54,023	18,13,245	15,52,426	3,83,229	19,35,655	15,69,169	3,99,283	19,68,452	16,58,918	4,25,153	20,84,071
11. Expenditure in England [item 5(b)]	256	176	432	573	9,639	10,212	4,449	409	4,858	5,338	506	5,844
12. Leave salary and Overseas Pay paid in England ..	38,095	21,713	59,808	54,418	19,120	73,538	52,692	18,514	(b) 71,206	25,375	8,915	34,290
13. Pensionary charges ..	57,682	10,740	68,422	59,233	11,282	70,515	59,486	11,331	70,817	60,268	11,480	71,748
14. Government contribution to Provident Fund ..	44,938	12,781	57,719	45,079	14,236	59,315	45,523	14,376	59,899	46,776	14,771	61,547
15. Interest on capital outlay ..	27,742	37,285	65,027	27,727	36,754	64,481	27,148	35,987	63,135	27,791	36,838	64,629
16. Depreciation charges ..	13,792	11,750	25,542	14,038	11,958	25,996	13,645	11,624	25,269	13,393	11,409	24,802
17. Stationery and Printing ..	36,228	8,053	44,281	33,906	7,953	41,859	47,174	11,065	58,239	53,922	12,648	66,570
18. Cost of Audit and Accounts	2,02,212	22,468	2,24,680	2,20,791	24,532	2,45,323	2,34,018	26,002	2,60,020	2,34,081	26,009	2,60,090
19. Expenditure on Retrenched Personnel	4,729	..	4,729	..	..	..	..	..	..	..	..	..
*20. Services rendered by non-commercial branches to commercial branches and *vice versa*	(a) 97,295	(a) 6,558	..	(a) 1,13,918	(a) 8,575	..	(a) 1,20,642	(a) 9,081	..	(a) 1,22,985	(a) 9,257	..
Total expenditure ..	19,82,191	4,85,547	23,63,885	21,22,109	5,27,278	25,26,894	21,73,946	5,37,672	25,81,895	22,48,847	5,56,986	26,73,591
Deficit	5,52,816	2,87,163	8,39,979	3,45,148	3,26,733	6,71,881	6,00,290	3,19,397	9,19,687	2,59,355	3,44,058	6,03,413

*(a) As these figures represent adjustments within the Department they have not been shown in the column representing totals for the Department as a whole.

(b) Includes Rs. 22,907 on account of the deputation pay of Sir James Pitkeathly and Mr. H. F. Davy in connection with the work of the London Stores Department.

(c) The head "Supplies and Services" has been abolished from 1937-38, and the detailed heads so far appearing under this head have been transferred to "Contingencies".

Note:—Items 5b(ii) and 13 to 19 above for 1937-38 and 11 to 19 for previous years refer to expenditure included *pro forma*. The rent of Central Public Works Department buildings occupied by the Indian Stores Department at Simla, Delhi and Calcutta is not included in the account. The income shown on the credit side of the account represents amount actually realised and *pro forma* credits for services rendered to the non-commercial departments of the Central Government against which no charges are made.

Certified that audit has obtained all the information and explanations required, that the statement of affairs has been drawn up according to the existing orders and presents a correct view of the affairs of the Indian Stores Department according to the best of my knowledge and belief and the information supplied to me from time to time.

The 2nd July 1938.

ISHWAR DAYAL,

Particulars.			Total.
	Rs.	Rs.	Rs.
Total receipts	[illegible]	[illegible]	[illegible]
Total	[illegible]	[illegible]	[illegible]

APPENDIX XXI.

Statement of the work done by the Indian Stores Department, year by year, since its constitution. (Vide *paragraphs 2 and 3 of the Report.*)

Year. 1	Value of textile stores and leather goods purchased. 2	Value of Engineering and miscellaneous stores purchased. 3	Total value of stores purchased. 4	Amount of stores inspected and charged on value. 5	Tonnage of stores inspected and charged on weight. 6	Tests and analyses carried out. 7
	Rs.	Rs.	Rs.	Rs.	Tons.	Nos.
1921-22 (January-March 1922)	59,27,330	..	59,27,330	..	..	..
1922-23	1,64,78,305	..	1,64,78,305	1,42,79,333	1,07,648	5,744
1923-24	1,17,08,745	50,15,656	1,67,24,401	2,21,45,403	1,71,797	7,364
1924-25	1,33,26,953	1,25,84,188	2,59,11,141	2,13,73,382	2,51,760	9,989
1925-26	1,18,81,516	1,47,86,417	2,66,67,933	3,98,78,885	2,92,550	9,932
1926-27	1,62,86,293	2,35,95,952	3,98,82,245	5,19,88,643	3,36,368	12,354
1927-28	1,18,82,009	2,54,22,663	3,73,04,672	5,71,10,815	3,31,628	13,065
1928-29	1,16,24,973	2,44,23,101	3,60,48,074	5,42,33,106	2,18,764	12,953
1929-30	1,13,36,292	3,15,89,409	4,29,25,701	7,47,99,137	3,43,109	14,273
1930-31	98,37,157	2,78,45,539	3,76,82,696	6,61,19,542	3,28,020	16,256
1931-32	1,06,14,978	2,53,85,028	3,60,00,006	4,84,21,867	3,10,504	14,401
1932-33	79,12,155	2,51,78,748	3,30,90,903	3,54,07,609	1,56,203	11,512
1933-34	85,55,361	2,74,38,774	3,59,94,135	4,46,65,505	2,54,833	15,499
1934-35	95,85,357	3,80,50,894	4,76,36,251	5,36,35,655	3,23,862	16,597
1935-36	99,22,244	4,59,82,622	5,59,04,866	6,76,31,556	3,95,008	19,060
1936-37	1,15,12,129	5,33,87,884	6,49,00,013	5,98,18,856	3,36,375	18,228
1937-38	1,58,13,144	6,31,18,234	7,89,31,378	7,48,32,187	4,35,609	22,902
Total from 1st January 1922 to 31st March 1938 ..	19,42,04,941	44,38,05,109	63,80,10,050	78,63,41,481	4,594,038	2,20,129

NOTE.—For Fees earned see Appendix XX.

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